

CATALOGUE OF GALAXIES
AND OF
CLUSTERS OF GALAXIES

VOLUME VI

F ZWICKY C.T. KOWAL

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CATALOGUE OF GALAXIES

AND OF

CLUSTERS OF GALAXIES

prepared by

F. Zwicky

Carnegie Institution of Washington

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with the collaboration of

C. T. Kowal

Volume VI

covering the Palomar survey fields

of the declination zones $+24^{\circ}$, $+30^{\circ}$, $+36^{\circ}$, $+42^{\circ}$, $+48^{\circ}$, $+54^{\circ}$

in the southern galactic cap

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FIELDS OF SURVEY ZONE +24°

FIELD No.	Survey Plate No.	Center of Field 1950.0		I. A. U. Galactic Coordinates		Page No.
		α	δ	λ	β	
		h m	o ' "	o ' "	o ' "	
470	1103	20 52	+ 24 30	69 40 -	12 50	2
471	290	21 18	+ 24 30	73 38 -	17 21	4
472	286	21 44	+ 24 30	78 01 -	21 35	6
473	204	22 10	+ 24 30	82 52 -	25 29	8
474	817	22 37	+ 24 30	88 26 -	29 07	10
475	1175	23 03	+ 24 30	94 21 -	32 09	12
476	843	23 29	+ 24 30	100 47 -	34 38	16
477	779	23 55	+ 24 30	107 41 -	36 30	20
478	205	0 05	+ 24 30	110 26 -	37 02	24
479	1188	0 31	+ 24 30	117 48 -	37 55	28
480	857	0 57	+ 24 30	125 19 -	38 04	32
481	1229	1 23	+ 24 30	132 45 -	37 27	36
482	896	1 49	+ 24 30	139 57 -	36 07	38
483	858	2 15	+ 24 30	146 45 -	34 07	42
484	222	2 42	+ 24 30	153 18 -	31 23	46
485	1276	3 08	+ 24 30	159 04 -	28 14	48
486	441	3 34	+ 24 30	164 18 -	24 37	50
487	31	4 00	+ 24 30	169 01 -	20 38	52
488	228	4 26	+ 24 00	173 42 -	16 40	54
489	1461	4 52	+ 24 00	177 36 -	12 04	56
490	454	5 18	+ 24 00	181 08 -	07 16	58

FIELDS OF SURVEY ZONE +30°

FIELD	Survey	Center of Field				I. A. U. Galactic				Page
No.	Plate	1950.0				Coordinates				
	No.	α		δ		λ		β		No.
		h	m	o	'	o	'	o	'	
491	757	20	52	+ 30	30	74	25	- 09	04	60
492	803	21	18	+ 30	30	78	12	- 13	16	62
493	1212	21	44	+ 30	30	82	21	- 17	11	64
494	383	22	10	+ 30	30	86	54	- 20	46	66
495	1174	22	37	+ 30	30	92	04	- 24	05	68
496	1184	23	03	+ 30	30	97	29	- 26	49	72
497	914	23	29	+ 30	30	103	18	- 29	01	76
498	606	23	53	+ 30	30	108	59	- 30	35	80
499	1257	0	05	+ 30	30	111	55	- 31	09	84
500	1244	0	31	+ 30	30	118	26	- 31	56	88
501	601	0	57	+ 30	30	125	02	- 32	04	92
502	30	1	23	+ 30	30	131	36	- 31	32	96
503	413	1	49	+ 30	30	137	59	- 31	21	100
504	1248	2	15	+ 30	30	144	04	- 28	34	104
505	1301	2	42	+ 30	30	150	01	- 26	07	108
506	847	3	08	+ 30	30	155	19	- 23	16	112
507	1457	3	34	+ 30	30	160	11	- 19	58	114
508	1468	4	00	+ 30	30	164	39	- 16	18	116
509	1454	4	26	+ 30	00	169	05	- 12	39	118
510	1314	4	52	+ 30	00	172	48	- 08	22	120
511	1455	5	18	+ 30	00	176	10	- 03	51	122

FIELDS OF SURVEY ZONE $+36^{\circ}$

FIELD	Survey	Center of Field				I. A. U. Galactic				Page
No.	Plate	1950.0				Coordinates				No.
	No.	α		δ		λ		β		
		h	m	o	'	o	'	o	'	
512	269	21	32	+	36 30	84	39	-	11 05	124
513	815	22	00	+	36 30	89	01	-	14 45	126
514	778	22	28	+	36 30	93	48	-	18 00	128
515	838	22	56	+	36 30	98	59	-	20 47	132
516	873	23	25	+	36 30	104	45	-	23 07	134
517	405	23	53	+	36 30	110	38	-	24 45	136
518	1247	0	05	+	36 30	113	14	-	25 16	138
519	398	0	33	+	36 30	119	25	-	25 59	140
520	406	1	01	+	36 30	125	41	-	26 02	142
521	1189	1	29	+	36 30	131	53	-	25 25	146
522	1225	1	58	+	36 30	138	07	-	24 04	150
523	407	2	26	+	36 30	143	53	-	22 09	154
524	1307	2	54	+	36 30	149	17	-	19 39	158
525	1333	3	22	+	36 30	154	18	-	16 40	162
526	1302	3	50	+	36 30	158	55	-	13 13	166
527	1458	4	18	+	36 00	163	28	-	09 45	168
528	1469	4	46	+	36 00	167	19	-	05 33	170

FIELDS OF SURVEY ZONE +42°

FIELD No.	Survey Plate No.	Center of Field 1950.0		I.A.U. Galactic Coordinates		Page No.
		α	δ	λ	β	
		h m	o ' "	o ' "	o ' "	
529	806	21 34	+ 42 30	89 03	- 06 56	172
530	580	22 04	+ 42 30	93 23	- 10 26	174
531	537	22 34	+ 42 30	98 05	- 13 30	176
532	876	23 04	+ 42 30	103 10	- 16 02	178
533	554	23 35	+ 42 30	108 45	- 18 03	180
534	1243	0 05	+ 42 30	114 25	- 19 22	182
535	851	0 35	+ 42 30	120 15	- 20 02	184
536	627	1 05	+ 42 30	126 08	- 20 00	188
537	824	1 36	+ 42 30	132 09	- 19 16	192
538	931	2 06	+ 42 30	137 48	- 17 53	194
539	449	2 36	+ 42 30	143 11	- 15 53	198
540	1618	3 06	+ 42 30	148 14	- 13 19	202
541	643	3 36	+ 42 30	152 56	- 10 13	206
542	651	4 07	+ 42 00	157 42	- 06 55	208
543	644	4 37	+ 42 00	161 37	- 02 57	210

FIELDS OF SURVEY ZONE +48⁰

FIELD No.	Survey Plate No.	Center of Field 1950.0		I.A.U. Galactic Coordinates		Page No.
		α	δ	λ	β	
		h m	o ' "	o ' "	o ' "	
544	589	21 36	+ 48 30	93 20 -	02 42	212
545	599	22 10	+ 48 30	97 46 -	06 11	214
546	590	22 44	+ 48 30	102 38 -	09 06	216
547	1162	23 18	+ 48 30	107 51 -	11 25	218
548	368	23 53	+ 48 30	113 32 -	13 04	220
549	839	0 05	+ 48 30	115 32 -	13 28	222
550	1224	0 39	+ 48 30	121 18 -	14 04	224
551	863	1 14	+ 48 30	127 16 -	13 54	226
552	861	1 48	+ 48 30	132 58 -	12 57	228
553	907	2 22	+ 48 30	138 28 -	11 18	230
554	845	2 57	+ 48 30	143 49 -	08 52	232
555	1249	3 31	+ 48 30	148 38 -	05 54	234

FIELDS OF SURVEY ZONE +54⁰

FIELD No.	Survey Plate No.	Center of Field 1950.0		I.A.U. Galactic Coordinates		Page No.
		α	δ	λ	β	
		h m	o ' "	o ' "	o ' "	
556	636	0 05	+ 54 30	116 35 -	07 33	236
557	1237	0 43	+ 54 30	122 07 -	08 05	238
558	945	1 22	+ 54 30	127 49 -	07 47	240
559	1245	2 00	+ 54 30	133 16 -	06 41	242

INTRODUCTION

INTRODUCTION

With the present volume VI of the Catalogue of Galaxies and Clusters of Galaxies (called THE CATALOG) our programmed survey of galaxies brighter than $m_{pg} \approx 15.7$ is complete. The areas covered in the six volumes cover the whole northern celestial hemisphere insofar as it is essentially unobscured by interstellar dust and gas clouds. An additional circular strip between declinations zero and minus three degrees is also included. Altogether 31350 galaxies and 9700 clusters of galaxies were surveyed and included in the catalogue. The fields analyzed in the six volumes cover respectively the areas shown in Figure 1. In Table I the numbers of galaxies and clusters of galaxies listed respectively in each volume of the Catalogue are given.

Table I

Volume	I	II	III	IV	V	VI
Galaxies	9500	6700	5300	2650	4200	3000
Clusters	1300	2350	2700	1450	1200	700

The numbers in Table I, as well as the total numbers of galaxies and clusters of galaxies are subject to small errors because of the difficulty of accurately taking into account overlaps of the various plates used.

The values of the symbolic velocities V_s quoted were derived from various sources, including the classical observations of Humason and Mayall as well as more recent ones by Arp, Greenstein, Page, de Vaucouleurs and Zwicky.

Furthermore there are both galaxies and clusters of galaxies which should have been included in the CATALOG but which do not actually appear. These omissions are due to the following reasons.

Galaxies Omitted

1. Oversight. Of these there are no doubt very few.
2. Galaxies whose integrated photographic magnitude is $m_p = 15.7$, but whose surface brightness is so low that they escape detection.
3. Galaxies which appear starlike on films obtained with the 18-inch Schmidt telescope. Unless these objects were recognized on plates taken with the 48-inch Schmidt telescope, the omitted objects include the compact* galaxies and in any case all of the very compact and the extremely compact (or quasi-stellar) galaxies.

In Table II we list a few typical examples of compact galaxies which could not be recognized as such with the 18-inch Schmidt telescope and which therefore were not included in the CATALOG.

Table II

Galaxy	R.A.	Decl.	m_{pg}	V_s in km/sec
II Zw 14	$4^h 30^m.5$	$+5^\circ 15'$	14.5	9870
II Zw 136	$21^h 30^m.0$	$+9^\circ 56'$	14.8	18750
3C 273	$12^h 26^m.6$	$+2^\circ 20'$	13.0	47400

The designations II Zw n refer to the n'th object in Zwicky's list No. II of Compact Galaxies, Compact Parts of Galaxies and Post-Eruptive Galaxies. $V_s = c \Delta\lambda/\lambda = cz$ is the symbolic velocity of recession of the respective object.

* We now call moderately compact those galaxies which can just be distinguished from stars with the 18-inch Schmidt telescope, compact those which are recognizable with the 48-inch, very compact those which are just distinguishable from stars with the 200-inch and extremely compact or quasi-stellar those that cannot even be identified on direct photographs with the 200-inch. These definitions, however, do not apply to the designations used in the CATALOG, since they were introduced long after (F. Zwicky, "Compact Galaxies", Acta Astronomica, Vol. 14, 151, 1964) the work on the first volumes was started.

Clusters of Galaxies Omitted

1. Again, as in the case of the galaxies, there have been oversights; but there are probably only a few of them.
2. Furthermore some clusters were not recognized as rich ones because of the poor quality of the original Palomar Sky Survey Plates. Whenever we thought that these were in poor focus, underexposed, insufficiently developed or taken in poor seeing or bright sky glow we have repeated them. Nevertheless Palomar Survey plates of very different quality were used. As a consequence especially the distribution of the extremely distant clusters of galaxies in the CATALOG shows obvious deficiencies in some places which are not real, the most serious ones of which appear in the belt of declination 72° .

Photoelectric Checks

Drs. C. D. Shane and G. E. Kron kindly undertook to check some of our magnitudes photoelectrically, using the 120-inch reflector of the Lick Observatory as well as some other telescopes. They have observed 590 of the objects in Volumes I, II and V of the CATALOG for the purpose. The publication of their data in the near future promises to throw valuable light on the problem of systematic and of accidental errors contained in our magnitudes.

Future Project

It is intended to supplement the CATALOG in the following ways.

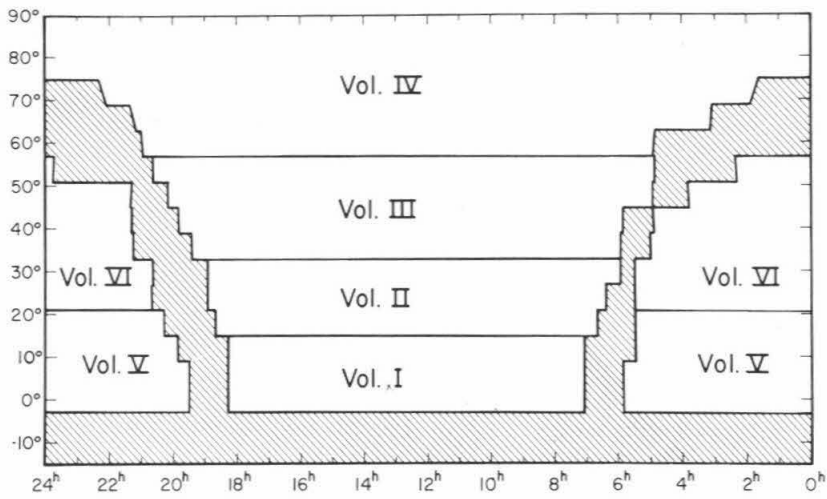
1. Data on several thousand compact galaxies and some clusters of compact galaxies will be published in a separate monograph.
2. Data on the symbolic velocities of recession will be reviewed periodically as they become available.
3. We intend to promote completion of the CATALOG through an analogous survey of the Sky from some station on the Southern hemisphere.

Acknowledgment

The construction of all six volumes of the CATALOG, with the exception of Vol. I has been supported to a great extent by a continued grant from the National Science Foundation.







Pasadena
May 20, 1968

Areas Covered by Each Volume of the Catalog



SYMBOLS USED ON THE CHARTS

GALAXIES

	$m_p \leq 11.0$		$13.1 \leq m_p \leq 14.0$
	$11.1 \leq m_p \leq 12.0$		$14.1 \leq m_p \leq 15.0$
	$12.1 \leq m_p \leq 13.0$		$15.1 \leq m_p \leq 15.7$

CLUSTERS OF GALAXIES



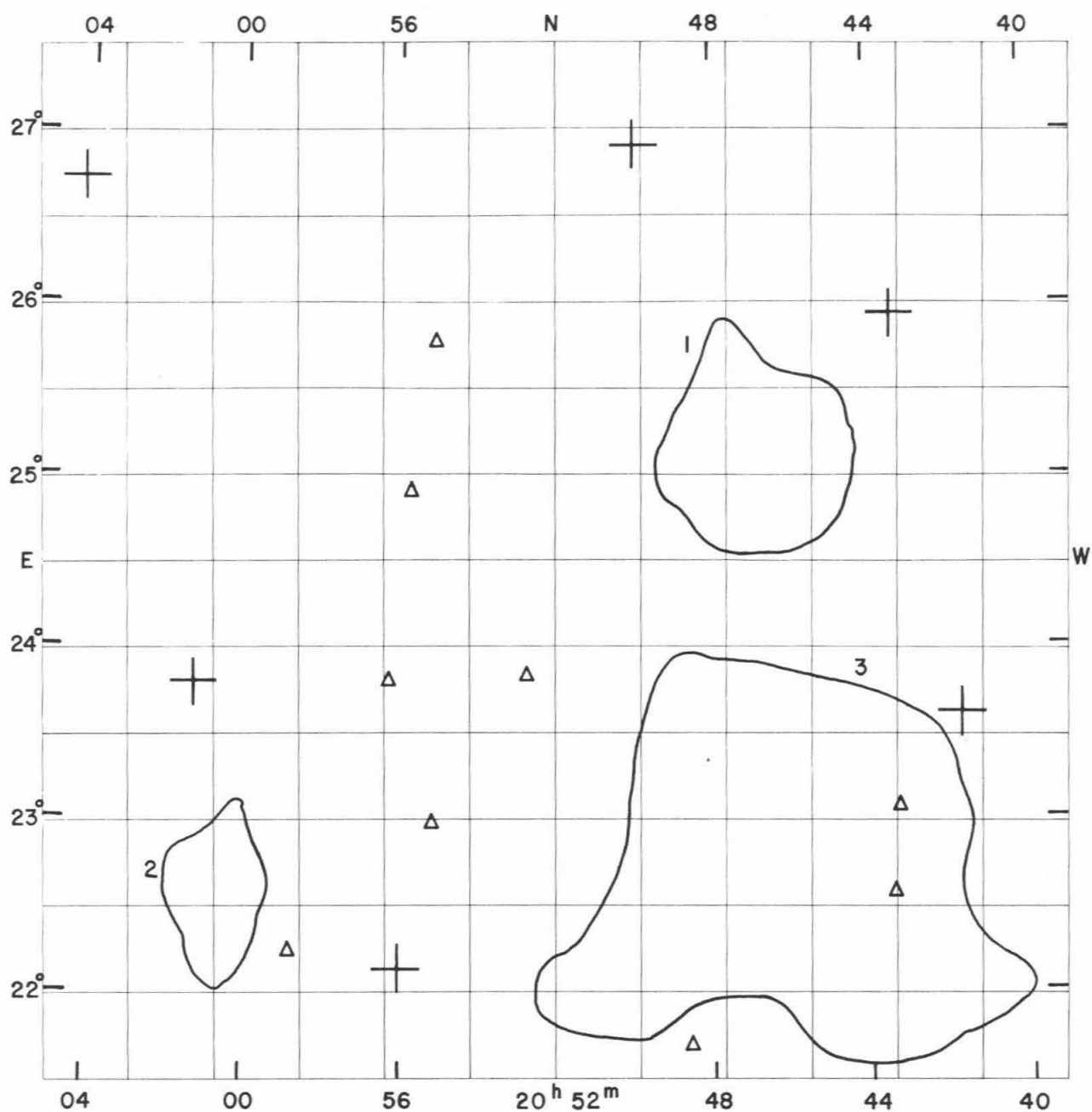
GC STARS are marked by a cross:



DISTANCES OF CLUSTERS:

Near:		$V_s \leq 15,000 \text{ km/sec}$
MD	= Medium distant:	$15,000 \text{ km/sec} < V_s \leq 30,000 \text{ km/sec}$
D	= Distance:	$30,000 \text{ km/sec} < V_s \leq 45,000 \text{ km/sec}$
VD	= Very distant:	$45,000 \text{ km/sec} < V_s \leq 60,000 \text{ km/sec}$
ED	= Extremely distant:	$60,000 \text{ km/sec} < V_s$

CATALOGUE



FIELD No. 470

$20^{\text{h}}52^{\text{m}} + 24^{\circ}30'$

Survey Plate No. 1103

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	°	'	"	
28895	20	41	36.1	+	23	36 35	6.78
28934	20	43	19.9	+	25	55 23	8.0
29112	20	49	59.1	+	26	54 32	4.76
29267	20	56	02.1	+	22	07 54	5.57
29413	21	01	16.7	+	23	47 51	7.45
29491	21	04	12.8	+	26	43 24	6.23

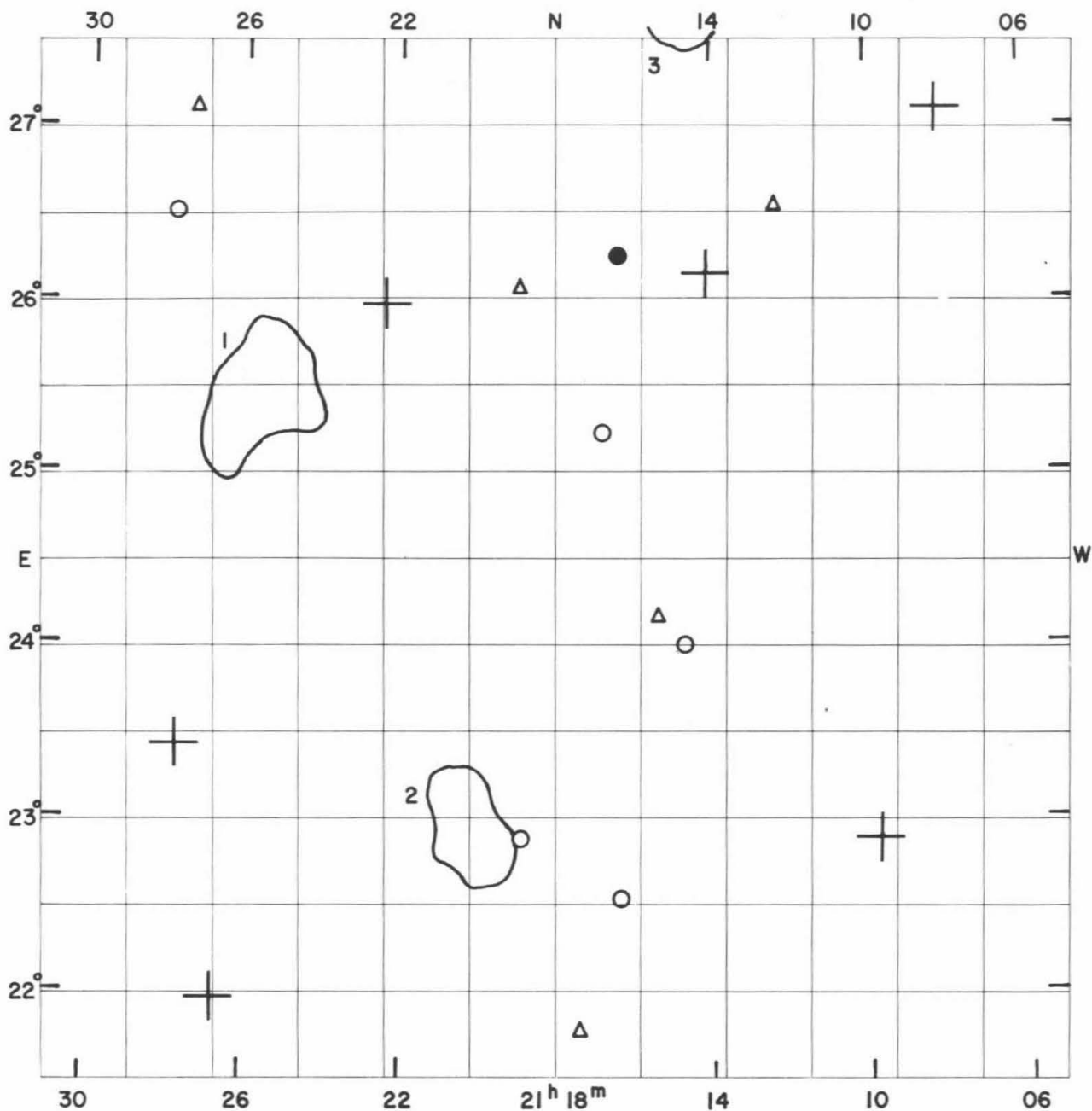
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
2046.1 + 2242	open	172	12.7	Near	3
2046.8 + 2506	medium compact	93	6.3	MD	1
2100.4 + 2233	medium compact	78	4.0	MD	2

Average number of galaxies per cluster = 114.3

GALAXIES

Position			NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ				
h	m	o				
20	43.3	+ 23 03		15.7		
20	43.4	+ 22 33		15.5		
20	48.6	+ 21 41		15.7		
20	52.8	+ 23 50		15.6		
20	55.1	+ 22 59		15.6		
20	55.1	+ 25 46		15.4		very diffuse
20	55.7	+ 24 54		15.6		
20	56.2	+ 23 48		15.7		
20	58.8	+ 22 14		15.7		



FIELD No. 471

$21^{\text{h}}18^{\text{m}} + 24^{\circ}30'$

Survey Plate No. 290

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	o	'	"	
29597	21	08	05.5	+	27	05 43	7.6
29632	21	09	40.2	+	22	52 30	7.6
29755	21	14	04.7	+	26	08 27	7.26
29980	21	22	20.7	+	25	57 30	5.74
30078	21	26	42.6	+	21	57 36	6.18
30109	21	27	40.8	+	23	25 07	4.76

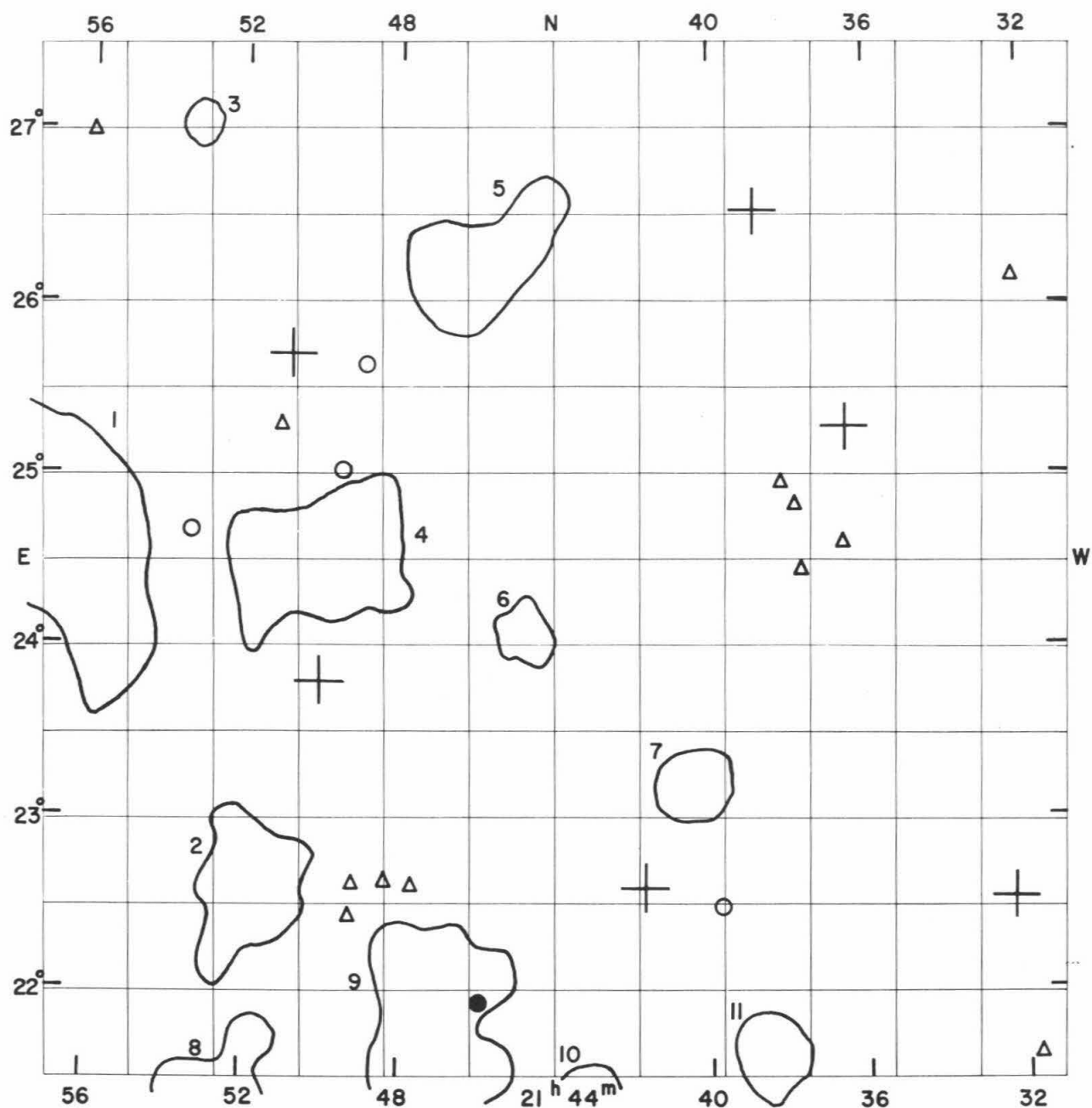
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
2114.6 + 2801	medium compact	79	4.5	MD	3
2120.1 + 2256	medium compact	76	3.1	D	2
2125.7 + 2526	open	85	3.9	MD	1

Average number of galaxies per cluster = 80.0

GALAXIES

Position a 1950 δ			NGC IC*	m _p	V _s km/sec	Remarks
h	m	o ' "				
21	12.3	+ 26 32		15.6		very diffuse
21	14.7	+ 24 00		15.0		
21	15.3	+ 24 09		15.7		
21	16.3	+ 22 32		14.8		
21	16.3	+ 26 14	7052	14.0		
21	16.7	+ 25 13		15.0		
21	17.4	+ 21 45		15.3		
21	18.9	+ 22 52	7053	14.3		
21	18.9	+ 26 03		15.6		
21	27.3	+ 27 06		15.6		diffuse
21	27.8	+ 26 30	7080	14.1		



FIELD No. 472

$21^{\text{h}}44^{\text{m}} + 24^{\circ}30'$

Survey Plate No. 286

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	°	'	"	
30211	21	32	16.8	+	22	31 55	6.37
30298	21	36	29.8	+	25	16 21	6.30
30355	21	38	50.4	+	26	31 26	7.43
30428	21	41	40.2	+	22	35 09	6.65
30618	21	50	02.7	+	23	46 38	7.48
30635	21	50	47.1	+	25	41 21	5.05

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
2138.4 + 2140	medium compact	74	2.3	ED	11
2140.4 + 2311	compact	82	2.2	VD	7
2143.0 + 2118	medium compact	95	2.8	VD	10
2144.8 + 2404	compact	62	1.9	VD	6
2146.1 + 2611	compact	62	4.2	D	5
2147.0 + 2148	open	153	5.9	D	9
2150.1 + 2430	compact	94	5.2	D	4
2151.7 + 2236	open	99	4.0	D	2
2152.6 + 2118	medium compact	126	4.1	MD	8
2153.3 + 2701	medium compact	63	1.3	ED	3
2158.1 + 2437	open	129	8.9	MD	1

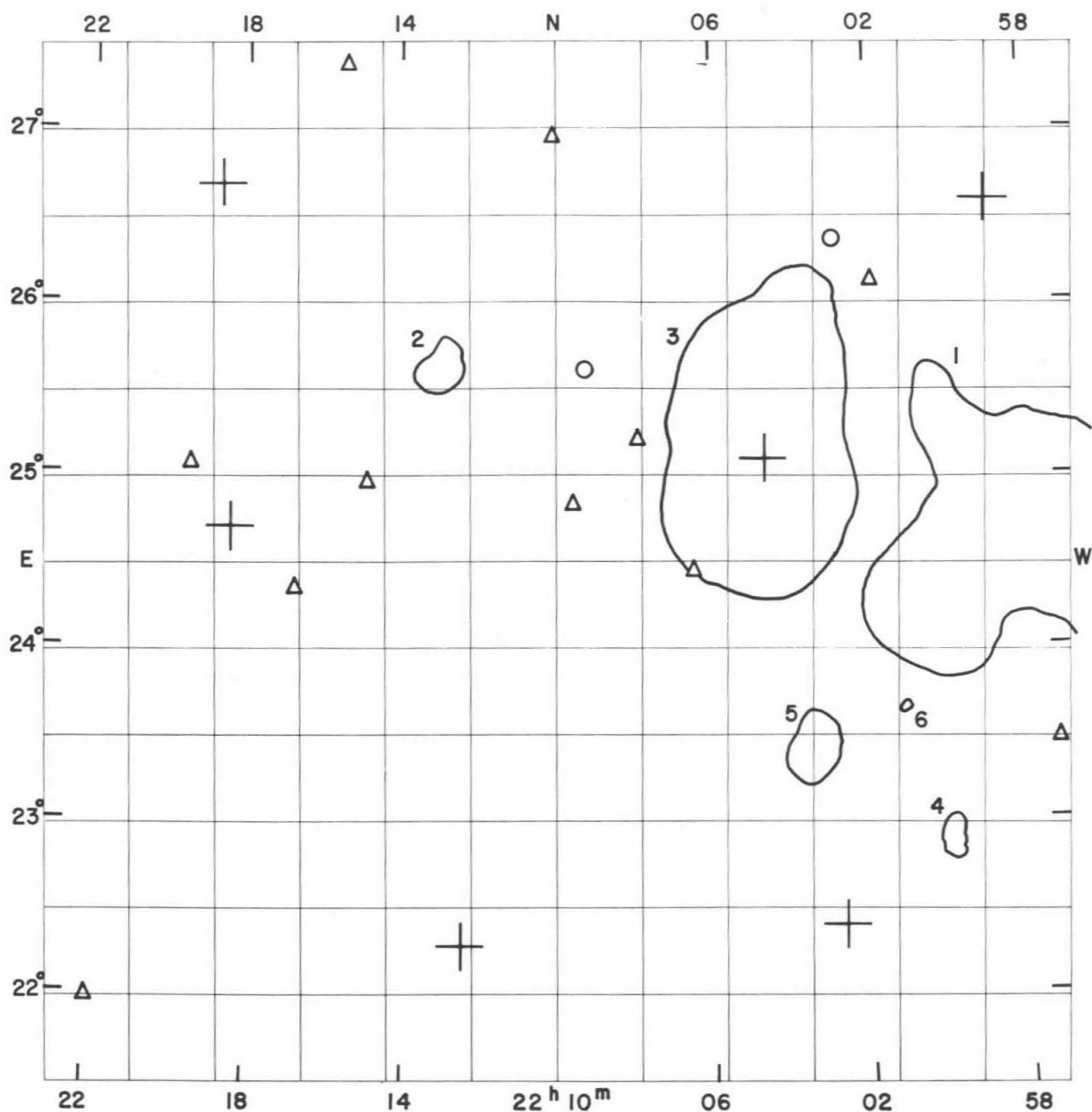
Average number of galaxies per cluster = 94.5

GALAXIES

Position a 1950 δ h m o			NGC IC*	m_p	V_s km/sec	Remarks
21 31.7	+	21 36	5119*	15.3		
21 32.2	+	26 08		15.5		
21 36.6	+	24 35		15.7		very compact
21 37.6	+	24 25		15.7		
21 37.8	+	24 49		15.7		
21 38.1	+	24 57		15.7		
21 39.7	+	22 29		15.0		
21 45.9	+	21 56	7137	13.3	+ 1505	$m_H = 13.1$
21 47.6	+	22 35		15.7		
21 48.3	+	22 37		15.2		
21 48.8	+	25 37		15.0		
21 49.1	+	22 36		15.7		
21 49.2	+	22 25		15.6		
21 49.4	+	25 01		14.5		
21 51.0	+	25 16		15.5		
21 53.3	+	24 39		14.8		
21 56.0	+	26 57		15.7		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951	Pettit 1954	Humason, Mayall, Sandage 1956	Holmberg 1958
7137	- -	13.00 Sc	13.1 Sc	- -



FIELD No. 473

$22^{\text{h}}10^{\text{m}} + 24^{\circ}30'$

Survey Plate No. 204

GC STARS

Nos.	R.A.			Decl.	m_p
	h	m	s	o	
30809	21	58	54.4	+ 26 35 20	7.6
30884	22	02	38.4	+ 22 23 38	7.40
30932	22	04	40.8	+ 25 06 01	3.96
31120	22	12	27.1	+ 22 16 29	6.69
31238	22	18	24.1	+ 24 42 18	8.3
31242	22	18	40.5	+ 26 40 59	6.50

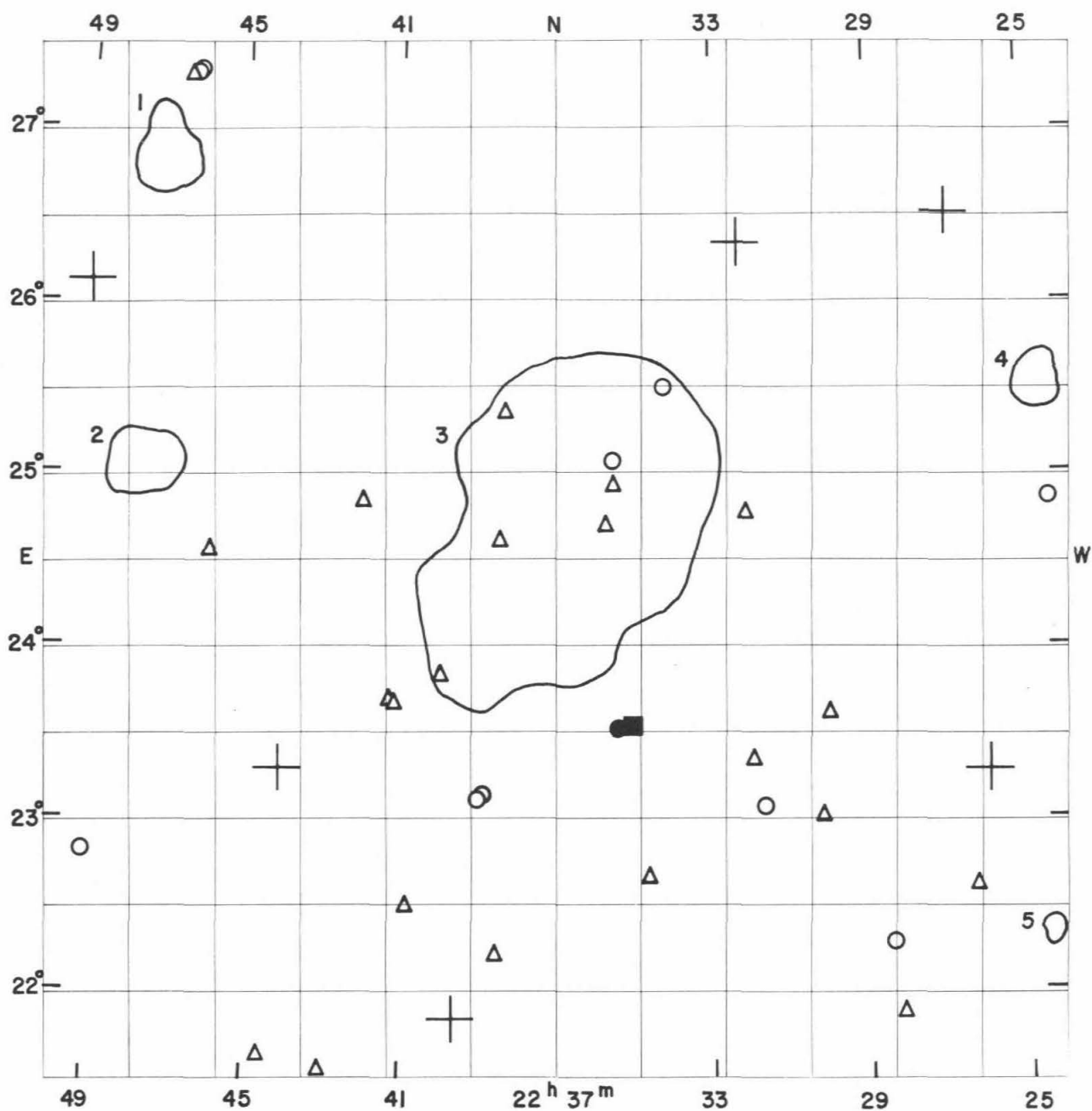
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
2158.1 + 2437	open	129	8.9	MD	1
2159.8 + 2253	compact	69	1.0	ED	4
2201.1 + 2339	compact	40	0.3	ED	6
2203.4 + 2324	compact	80	1.9	VD	5
2204.5 + 2507	open	74	7.9	MD	3
2212.9 + 2537	compact	76	1.5	ED	2

Average number of galaxies per cluster = 78.0

GALAXIES

Position			NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ				
h	m	o				
21	57.2	+ 23 28		15.5		
22	01.9	+ 26 07		15.6		
22	02.8	+ 26 22		15.0		
22	06.5	+ 24 26		15.7		
22	07.9	+ 25 12		15.7		
22	09.2	+ 25 36	7224	14.7		
22	09.6	+ 24 50		15.7		compact
22	10.1	+ 26 57		15.5		
22	14.8	+ 24 57		15.7		
22	15.4	+ 27 22		15.4		
22	16.7	+ 24 20		15.5		
22	19.4	+ 25 03		15.7		
22	21.9	+ 21 58		15.6		double system



FIELD No. 474

$22^{\text{h}}37^{\text{m}} + 24^{\circ}30'$

Survey Plate No. 817

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	o	'	"	
31389	22	25	50.8	+	23	16 38	9.0
31415	22	26	49.5	+	26	30 25	5.96
31520	22	32	15.1	+	26	20 21	7.26
31683	22	39	38.0	+	21	50 19	7.42
31776	22	44	07.2	+	23	18 07	4.14
31876	22	49	02.8	+	26	07 31	6.71

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
2224.4 + 2221	compact	35	0.8	ED	5
2224.6 + 2532	compact	87	1.6	ED	4
2236.7 + 2442	open	123	9.7	Near	3
2247.2 + 2650	medium compact	55	2.3	VD	1
2247.7 + 2503	medium compact	64	2.2	VD	2

Average number of galaxies per cluster = 72.8

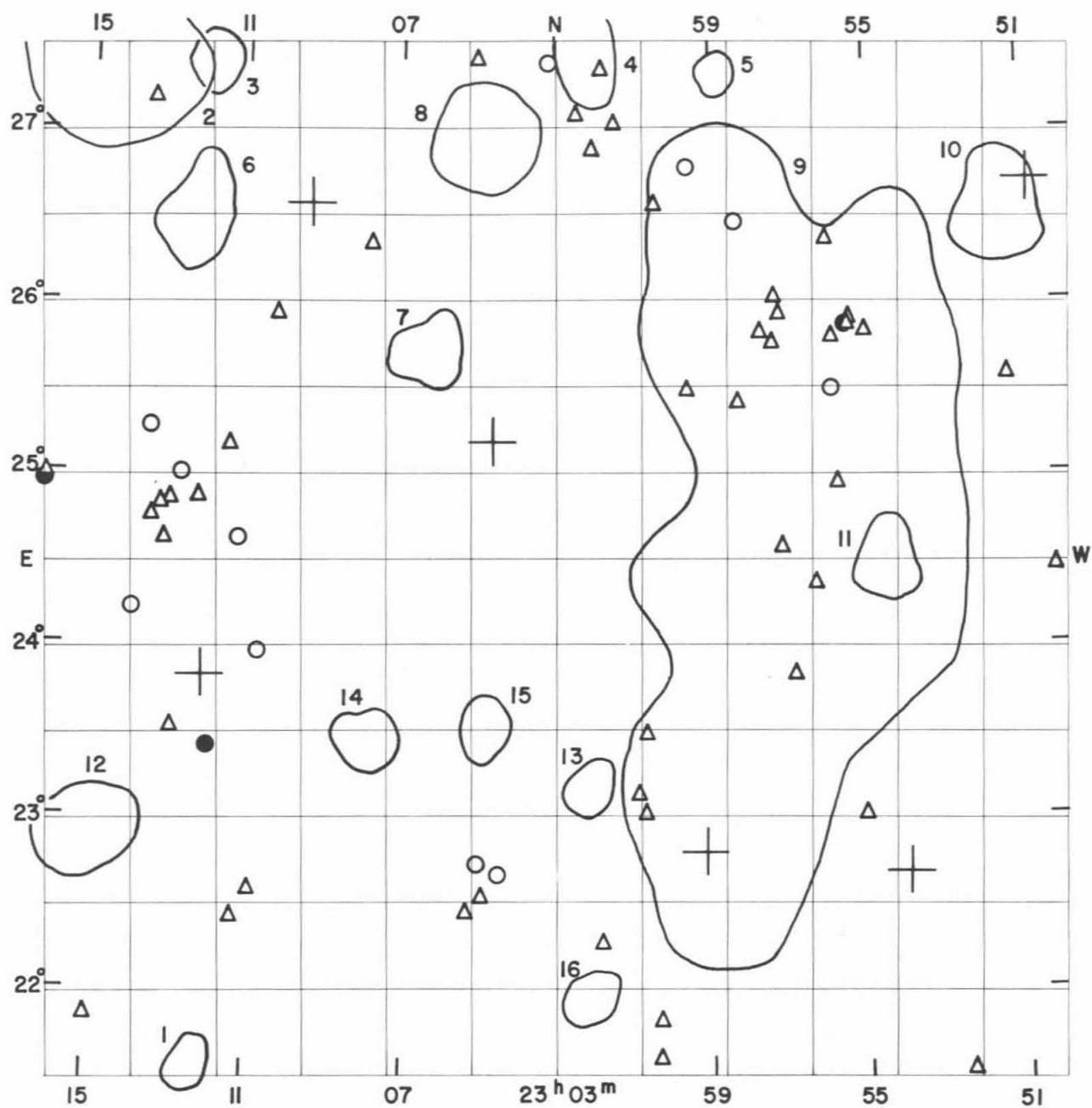
GALAXIES

Position a 1950 δ h m o			NGC IC*	m_p	V_s km/sec	Remarks
22 24.2	+	24 52		15.0		
22 26.3	+	22 37		15.7		
22 28.1	+	21 53		15.7		
22 28.3	+	22 17		15.0		
22 29.9	+	23 37		15.7		
22 30.1	+	23 01		15.6		
22 31.6	+	23 05	5231*	14.8		compact
22 31.9	+	23 21		15.7		
22 32.1	+	24 46		15.3		
22 34.2	+	25 30	5233*	14.8		
22 34.6	+	22 40		15.7		
22 35.0	+	23 32	7332	12.0 + 871 *)	$m_H = 12.6$ S	
22 35.4	+	23 31	7339	13.1 + 1271		
22 35.5	+	24 56		15.6		
22 35.5	+	25 05		15.0		double nebula
22 35.7	+	24 42		15.6		
22 38.3	+	25 22		15.6		
22 38.4	+	24 37		15.6		
22 38.5	+	22 13		15.7		
22 38.8	+	23 08	5242*	14.7		
22 39.0	+	23 07	5243*	14.3		
22 39.9	+	23 51		15.7		
22 40.8	+	22 30		15.7		
22 41.1	+	23 40		15.7		
22 41.2	+	23 41		15.7		
22 41.9	+	24 51		15.6		compact
22 43.0	+	21 33	5253*	15.5		
22 44.5	+	21 38		15.4		
22 45.9	+	24 33		15.5		
22 46.3	+	27 21		14.9		
22 46.4	+	27 19		14.1		
22 46.5	+	27 18		15.7		very compact
22 49.0	+	22 49	5258*	14.1		

*) Humason, Mayall, Sandage, give $V_s = +1204$.

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
7332	-	-	12.07	S0	11.7	S0	-	-
7339	-	-	13.24	Sc	-	-	-	-



FIELD No. 475

$23^{\text{h}}03^{\text{m}} + 24^{\circ}30'$

Survey Plate No. 1175

GC STARS

Nos.	R.A.			Decl.	m_p
	h	m	s	° ' "	
31916	22	50	45.3	+ 26 42 42	7.8
31982	22	53	57.6	+ 22 41 19	7.37
32086	22	59	08.5	+ 22 48 16	7.82
32201	23	04	40.3	+ 25 11 53	4.98
32305	23	09	23.3	+ 26 34 37	6.40
32355	23	12	08.3	+ 23 49 49	6.49

CLUSTERS OF GALAXIES

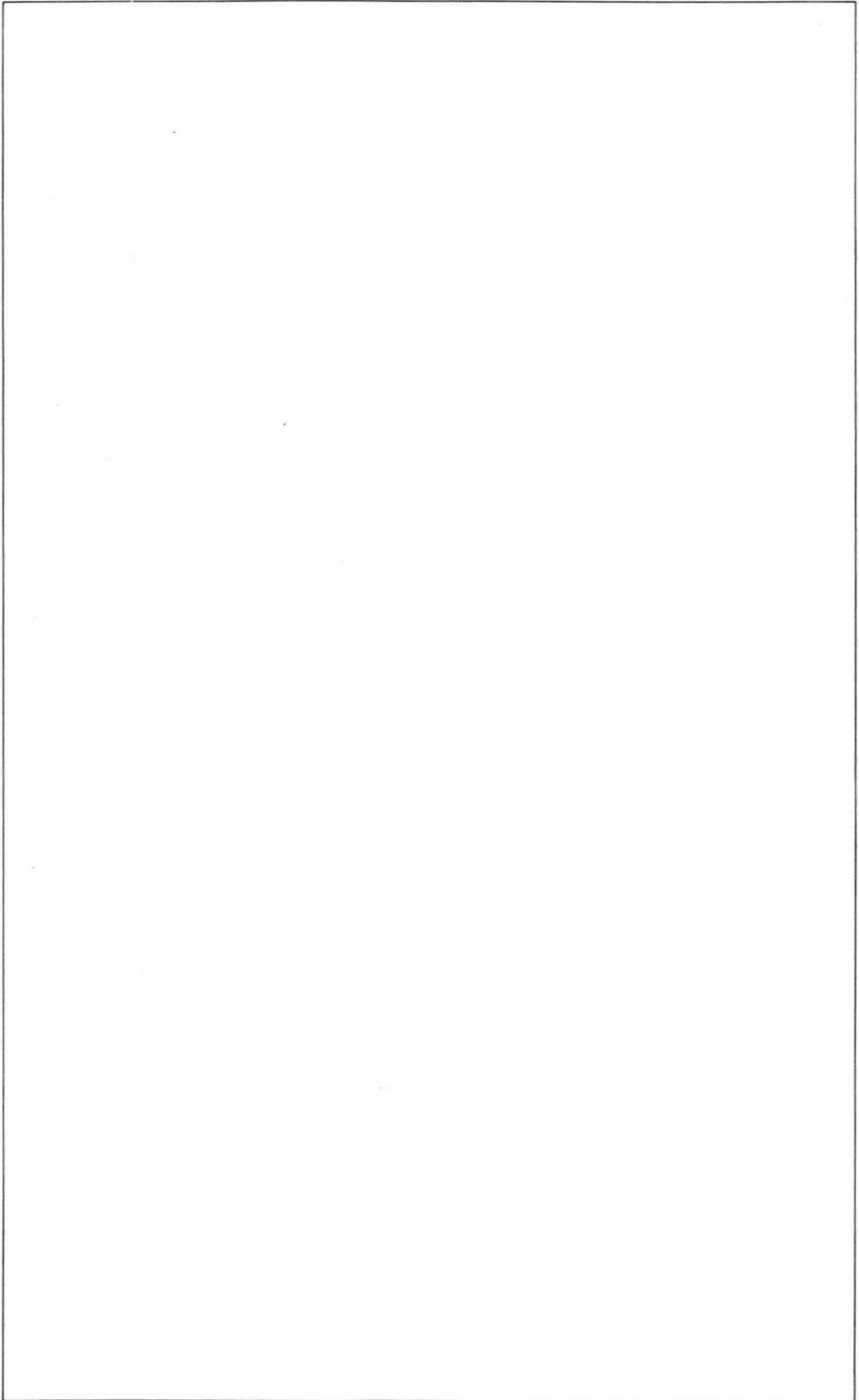
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
2251.4 + 2634	medium compact	98	3.2	VD	10
2254.4 + 2429	medium compact	93	2.3	VD	11
2256.8 + 2445	open	169	16.3	Near	9
2258.8 + 2719	compact	57	1.3	ED	5
2302.2 + 2156	medium compact	55	1.8	ED	16
2302.2 + 2309	open	65	1.7	ED	13
2302.2 + 2729	compact	88	2.9	VD	4
2304.8 + 2330	compact	60	1.8	ED	15
2304.9 + 2657	open	103	3.4	VD	8
2306.3 + 2543	medium compact	78	2.2	ED	7
2307.8 + 2327	open	61	2.0	ED	14
2311.9 + 2724	medium compact	59	1.9	VD	3
2312.3 + 2134	medium compact	53	1.6	ED	1
2312.4 + 2629	open	85	2.8	VD	6
2314.7 + 2723	open	106	5.4	D	2
2315.0 + 2254	open	90	3.1	D	12

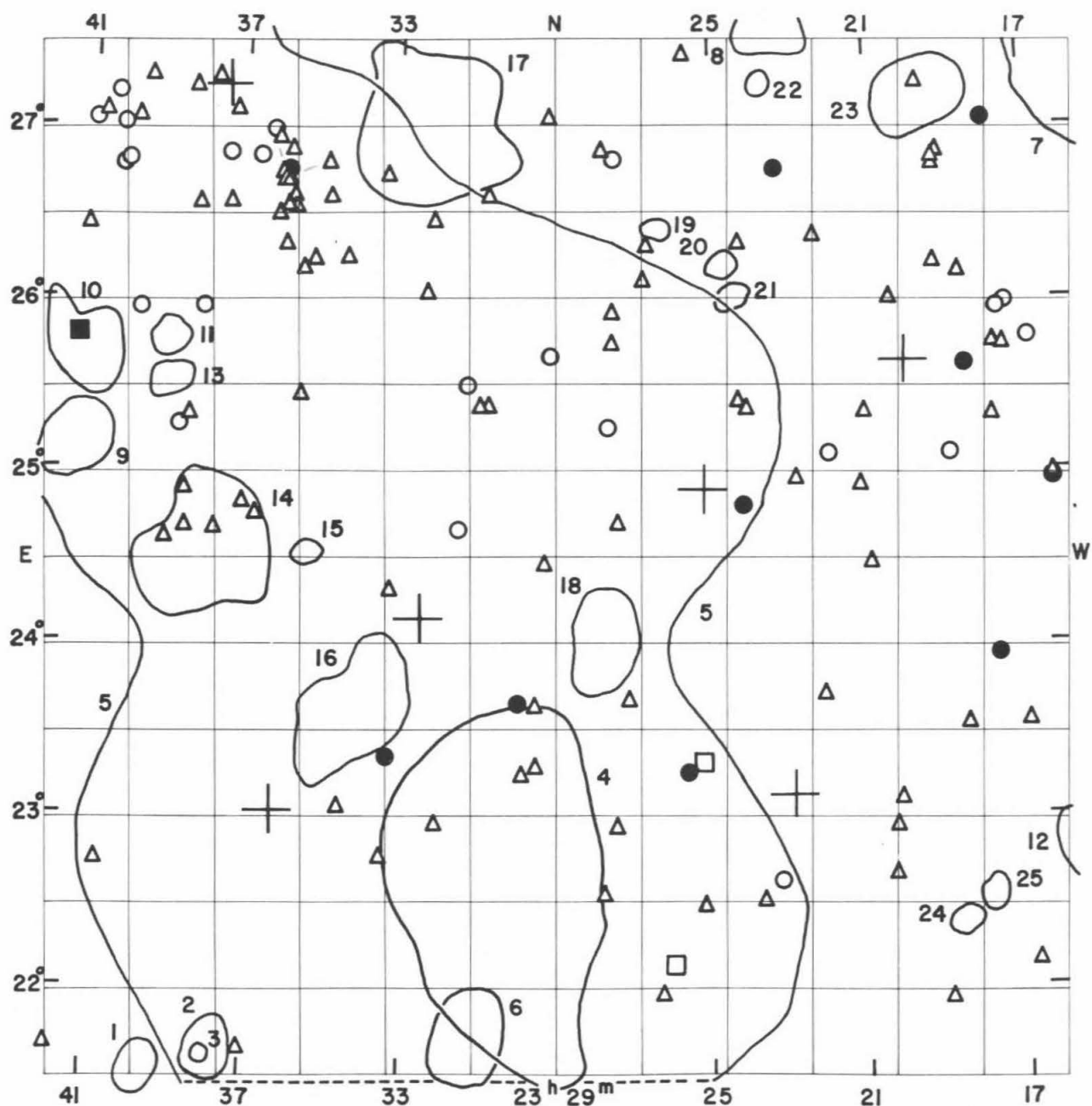
Average number of galaxies per cluster = 82.5

GALAXIES

Position			NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ				
h	m	o				
22	50.1	+ 24 27		15.3		
22	51.3	+ 25 35		15.4		
22	52.4	+ 21 33		15.6		
22	55.0	+ 23 01		15.7		
22	55.0	+ 25 51		15.5		
22	55.4	+ 25 54	7431	15.6		
22	55.5	+ 25 52	7435	15.5		
22	55.6	+ 25 53	7433+7436	14.0		double system
22	55.8	+ 24 57		15.2		
22	55.8	+ 25 30		15.0		
22	55.9	+ 25 48		15.4		
22	56.0	+ 26 22		15.3		
22	56.3	+ 24 22		15.5		
22	56.8	+ 23 51		15.7		very diffuse
22	57.2	+ 24 35		15.7		
22	57.2	+ 25 56		15.5		
22	57.3	+ 26 02		15.6		diffuse
22	57.4	+ 25 45		15.5		
22	57.7	+ 25 50		15.6		
22	58.3	+ 25 25		15.6		
22	58.4	+ 26 28		14.8		
22	59.6	+ 25 29		15.5		
22	59.6	+ 26 47	7466	14.4		
23	00.3	+ 21 37	5282*	15.2		
23	00.3	+ 21 50		15.6		diffuse
23	00.4	+ 26 34		15.3		
23	00.7	+ 23 01		15.6		compact
23	00.7	+ 23 29		15.7		
23	00.9	+ 23 08		15.7		
23	01.5	+ 27 02		15.5		
23	01.8	+ 22 16		15.5		
23	01.8	+ 27 21		15.6		compact

Position			NGC IC*	m_p	V_s km/sec	Remarks
α	1950	δ				
h	m	o				
23	02.1	+ 26 53		15.6		
23	02.5	+ 27 05		15.6		very compact
23	03.2	+ 27 23		14.7		
23	04.4	+ 22 40	5285*	14.4		
23	04.9	+ 22 33		15.6		
23	05.0	+ 22 44	7489	14.3		
23	05.1	+ 27 24		15.5		
23	05.3	+ 22 26		15.7		
23	07.8	+ 26 21		15.1		compact
23	10.3	+ 25 56		15.7		
23	10.7	+ 23 58		15.0		
23	10.8	+ 22 35		15.7		
23	11.2	+ 24 38	7527	14.7		
23	11.3	+ 22 25		15.6		very diffuse
23	11.4	+ 25 10		15.5		double system
23	12.0	+ 23 24	7539	13.7		
23	12.2	+ 24 52	5293*	15.6		
23	12.7	+ 25 00	7548	14.5		
23	12.9	+ 23 31		15.7		
23	13.0	+ 24 51	5295*	15.7		compact
23	13.2	+ 24 37		15.6		
23	13.2	+ 24 50	5296*	15.5		
23	13.5	+ 24 45	5297*	15.7		compact
23	13.5	+ 25 17	5298*	15.0		
23	13.5	+ 27 10		15.4		
23	13.9	+ 24 13	7568	14.5		
23	15.0	+ 21 52		15.7		very diffuse
23	16.2	+ 24 57		14.0		
23	16.2	+ 24 59		15.7		





FIELD No. 476
 $23^{\text{h}}29^{\text{m}} + 24^{\circ}30'$

Survey Plate No. 843

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	°	'	"	
32530	23	20	00.3	+ 25	38	38	6.55
32585	23	22	52.8	+ 23	07	43	4.57
32640	23	25	11.0	+ 24	53	32	5.87
32789	23	32	29.4	+ 24	08	59	6.70
32859	23	36	18.4	+ 23	01	55	7.01
32880	23	37	30.3	+ 27	14	15	6.75

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
2314.7 + 2723	open	106	5.4	D	7
2315.0 + 2254	open	90	3.1	D	12
2317.9 + 2233	medium compact	51	1.0	ED	25
2318.6 + 2224	open	35	1.0	ED	24
2319.6 + 2712	medium compact	64	2.7	VD	23
2323.4 + 2734	medium compact	61	2.1	VD	8
2323.7 + 2715	medium compact	51	0.7	ED	22
2324.4 + 2602	medium compact	45	1.0	ED	21
2324.8 + 2613	compact	65	0.9	ED	20
2326.4 + 2625	compact	55	0.7	ED	19
2327.8 + 2401	medium compact	69	2.7	VD	18
2330.2 + 2239	medium compact	231	8.9	MD	4
2331.2 + 2144	medium compact	145	2.7	VD	6
2332.3 + 2700	medium compact	93	5.0	MD	17
2334.2 + 2337	medium compact	115	3.8	D	16
2335.4 + 2431	compact	53	0.8	ED	15
2335.5 + 2449	medium compact	970	32.3	Near	5
2337.8 + 2140	medium compact	61	1.7	VD	2
2337.9 + 2434	medium compact	103	4.3	D	14
2338.0 + 2138	compact	35	0.5	ED	3
2338.9 + 2532	compact	59	1.3	ED	13
2338.9 + 2546	compact	59	1.2	ED	11
2339.6 + 2132	open	60	1.4	ED	1
2341.1 + 2544	medium compact	101	2.8	D	10
2341.3 + 2510	medium compact	71	2.5	VD	9

Average number of galaxies per cluster = 113.9

GALAXIES

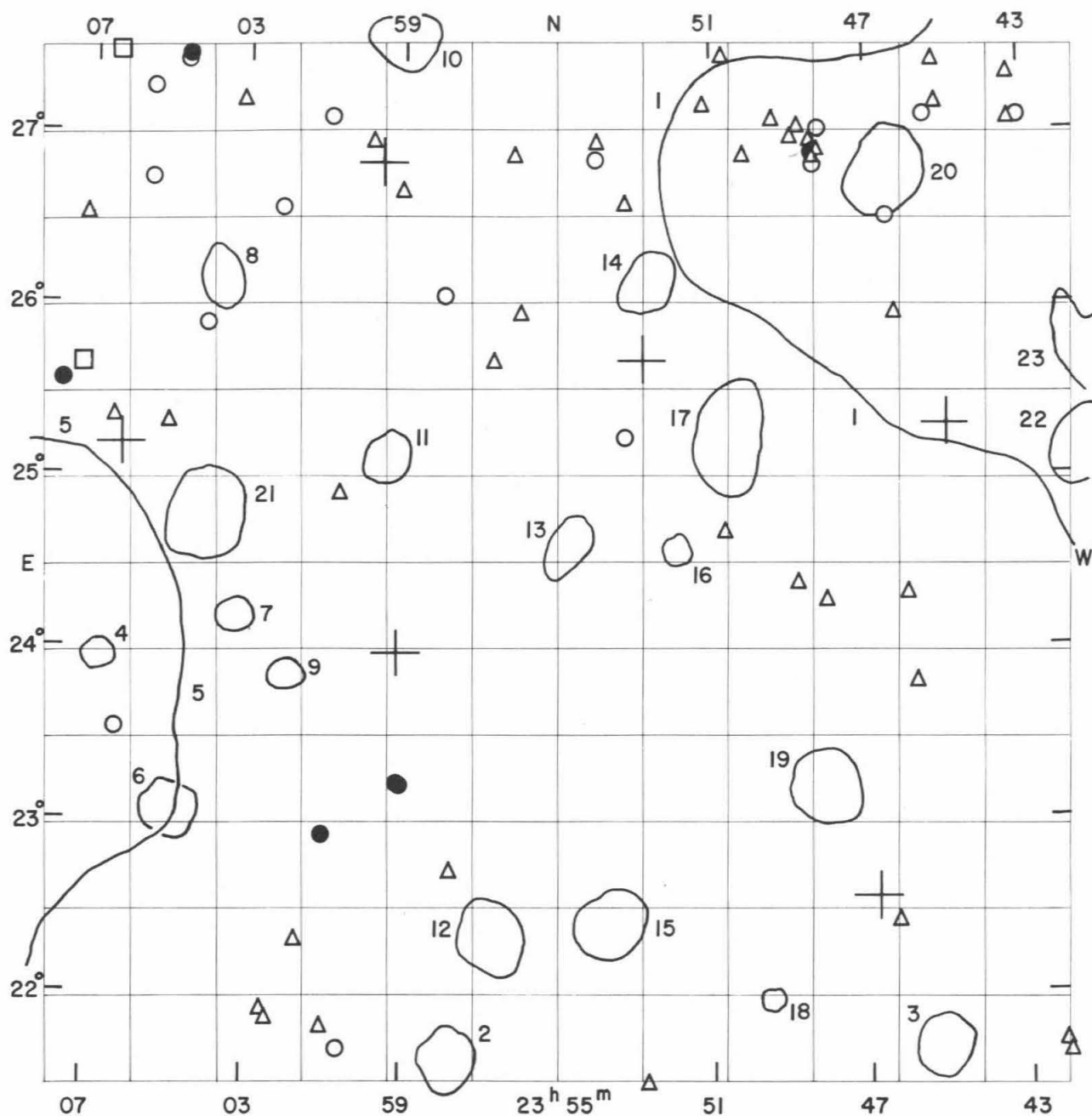
Position			NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ				
h	m	o				
23	16.2	+ 24 57		14.0		
23	16.2	+ 24 59		15.7		
23	16.7	+ 22 09		15.5		
23	16.8	+ 25 47		14.8		
23	16.9	+ 23 33		15.7		
23	17.4	+ 25 44		15.6		diffuse
23	17.4	+ 26 00		14.1		
23	17.6	+ 23 56	7620	13.5		
23	17.6	+ 25 57		15.0		compact
23	17.7	+ 25 19		15.5		
23	17.7	+ 25 44		15.5		
23	17.9	+ 27 03	7624	13.7		
23	18.4	+ 23 32		15.6		
23	18.4	+ 25 37	7628	13.8		
23	18.6	+ 26 08		15.7		
23	18.8	+ 25 06	5315*	14.6		compact
23	18.9	+ 21 56		15.7		
23	19.1	+ 26 51		15.4		
23	19.2	+ 26 12		15.7		
23	19.2	+ 26 48		15.3		
23	19.2	+ 26 49		15.3		
23	19.6	+ 27 15		15.4		
23	20.1	+ 23 06		15.7		

a	Position		NGC IC*	m_p	V_s km/sec	Remarks
	1950	δ				
h	m	o				
23	20.3	+ 22 39		15.3		
23	20.3	+ 22 56		15.4		
23	20.3	+ 26 00		15.7		
23	20.8	+ 24 28		15.6		
23	21.1	+ 24 55		15.1		
23	21.1	+ 25 20		15.7		compact
23	21.9	+ 25 07		15.0		
23	22.0	+ 23 42		15.7		
23	22.3	+ 26 22		15.6		very diffuse
23	22.8	+ 24 57		15.6		double nebula
23	23.2	+ 22 38		15.0		
23	23.3	+ 26 45	7660	13.9		
23	23.6	+ 22 31		15.5		
23	24.1	+ 25 22		15.7		diffuse
23	24.2	+ 24 48	7664	13.3		
23	24.3	+ 25 24		15.4		
23	24.3	+ 26 20		15.5		
23	25.1	+ 22 29		15.6		
23	25.2	+ 23 19	7673	12.7		
23	25.6	+ 23 15	7677	13.9		
23	25.7	+ 27 24		15.5		
23	26.0	+ 22 08	7678	12.7	+ 3446	$m_H = 12.9$ S
23	26.2	+ 21 57		15.4		very diffuse
23	26.6	+ 26 18		15.5		
23	26.7	+ 26 06		15.7		
23	27.1	+ 23 40		15.6		
23	27.4	+ 22 55		15.6		multiple system
23	27.4	+ 24 41		15.6		
23	27.5	+ 25 43		15.5		compact
23	27.5	+ 25 55		15.7		compact
23	27.5	+ 26 49		14.8		
23	27.6	+ 25 15		15.0		double nebula
23	27.7	+ 22 33		15.5		
23	27.8	+ 26 51		15.7		
23	29.1	+ 25 40		14.4		
23	29.2	+ 27 03		15.5		
23	29.3	+ 24 27		15.7		
23	29.5	+ 23 17		15.4		
23	29.5	+ 23 38		15.3		multiple system
23	29.8	+ 23 14		15.6		very diffuse double nebula
23	30.0	+ 23 39		14.0		
23	30.7	+ 25 22		15.4		
23	30.7	+ 26 36		15.5		diffuse
23	30.9	+ 25 22		15.1		
23	31.2	+ 25 30		14.8		
23	31.5	+ 24 40	7698	14.5		
23	32.1	+ 22 57		15.7		
23	32.2	+ 26 26		15.4		
23	32.3	+ 26 02		15.4		
23	33.3	+ 23 20	7712	13.7		
23	33.3	+ 24 18		15.7		diffuse
23	33.3	+ 26 43		15.6		
23	33.5	+ 22 46		15.1		
23	34.3	+ 26 13		15.5		
23	34.5	+ 23 03		15.7		
23	34.8	+ 26 36		15.6		compact
23	34.9	+ 26 48		15.5		
23	35.3	+ 26 13		15.5		
23	35.5	+ 25 25	7718	15.2		

Position α 1950 δ			NGC IC*	m _p	V _s km/sec	Remarks
h	m	o °				
23	35.5	+ 26 10		15.4		
23	35.8	+ 26 32		15.7		compact
23	35.8	+ 26 37		15.7		compact
23	35.8	+ 26 53		15.5		compact
23	35.9	+ 26 43	5341*	15.5		compact
23	36.0	+ 26 19		15.6		diffuse
23	36.0	+ 26 33		15.4		compact
23	36.0	+ 26 42		15.3		compact
23	36.0	+ 26 45	7720	13.9		double system
23	36.1	+ 26 42		15.6		very compact
23	36.2	+ 26 30		15.7		
23	36.2	+ 26 44	5342*	15.4		compact
23	36.2	+ 26 56		15.5		
23	36.3	+ 26 59		15.0		compact
23	36.7	+ 24 44		15.3		compact
23	36.7	+ 26 50		15.0		
23	37.1	+ 21 39		15.1		
23	37.1	+ 24 49		15.7		
23	37.3	+ 27 06		15.7		compact
23	37.4	+ 26 33		15.7		compact
23	37.4	+ 26 52	7728	14.3		
23	37.8	+ 24 39		15.7		
23	37.8	+ 27 17		15.5		
23	38.1	+ 25 57		14.5		extremely diffuse
23	38.2	+ 26 33		15.1		
23	38.4	+ 25 20		15.5		compact
23	38.4	+ 27 14		15.7		compact
23	38.5	+ 24 40	5346*	15.7		
23	38.5	+ 24 53		15.4		
23	38.7	+ 25 17		14.7		
23	39.0	+ 24 36	5347*	15.7		
23	39.5	+ 27 18		15.7		
23	39.7	+ 25 57	7735	15.0		
23	39.8	+ 27 03		15.6		
23	40.1	+ 26 49		15.0		
23	40.2	+ 26 46		14.8		
23	40.3	+ 27 01		15.0		
23	40.4	+ 27 12		15.0		
23	40.7	+ 22 44		15.7		
23	40.7	+ 27 05	7740	15.6		compact
23	41.0	+ 27 02		14.9		
23	41.2	+ 26 25		15.7		compact
23	41.3	+ 25 48	7741	11.8	+ 769	m _H = 12.6 S
23	42.0	+ 21 40		15.6		diffuse

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
7678	-	-	12.54	Sc	12.5	Sc	-	-
7741	-	-	12.54	SBb	12.3	SBc	11.63	Sc+



FIELD No. 477
 $23^{\text{h}}55^{\text{m}} + 24^{\circ}30'$

Survey Plate No. 779

GC STARS

Nos.	R.A.			Decl.	m_p
	h	m	s		
33019	23	44	57.5	+ 25 18 07	7.06
33056	23	46	46.1	+ 22 34 37	7.02
33178	23	52	50.1	+ 25 40 37	6.67
33324	23	59	09.0	+ 23 58 30	6.81
33334	23	59	33.2	+ 26 49 03	5.85
138	0	06	17.0	+ 25 11 01	6.35

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
2335.5 + 2449	medium compact	970	32.3	Near	1
2341.1 + 2544	medium compact	101	2.8	D	23
2341.3 + 2510	medium compact	71	2.5	VD	22
2345.1 + 2140	open	58	1.8	VD	3
2346.5 + 2647	medium compact	68	2.6	D	20
2348.1 + 2312	open	100	2.2	VD	19
2349.4 + 2158	medium compact	55	0.7	ED	18
2350.5 + 2513	medium compact	164	2.9	ED	17
2351.9 + 2434	medium compact	33	0.9	ED	16
2352.7 + 2607	medium compact	103	1.8	VD	14
2353.6 + 2224	medium compact	71	2.1	ED	15
2354.7 + 2436	open	88	1.5	ED	13
2356.6 + 2219	open	96	2.2	ED	12
2357.7 + 2137	medium compact	73	1.9	VD	2
2359.0 + 2731	medium compact	53	1.9	ED	10
2359.4 + 2506	compact	55	1.5	ED	11
0001.9 + 2351	medium compact	35	1.1	ED	9
0003.2 + 2410	compact	33	1.1	ED	7
0003.7 + 2608	compact	60	1.6	ED	8
0004.0 + 2446	medium compact	95	2.7	ED	21
0004.8 + 2304	medium compact	57	1.8	ED	6
0006.8 + 2357	medium compact	65	1.0	ED	4
0014.5 + 2315	open	245	23.6	Near	5

Average number of galaxies per cluster = 119.5

GALAXIES

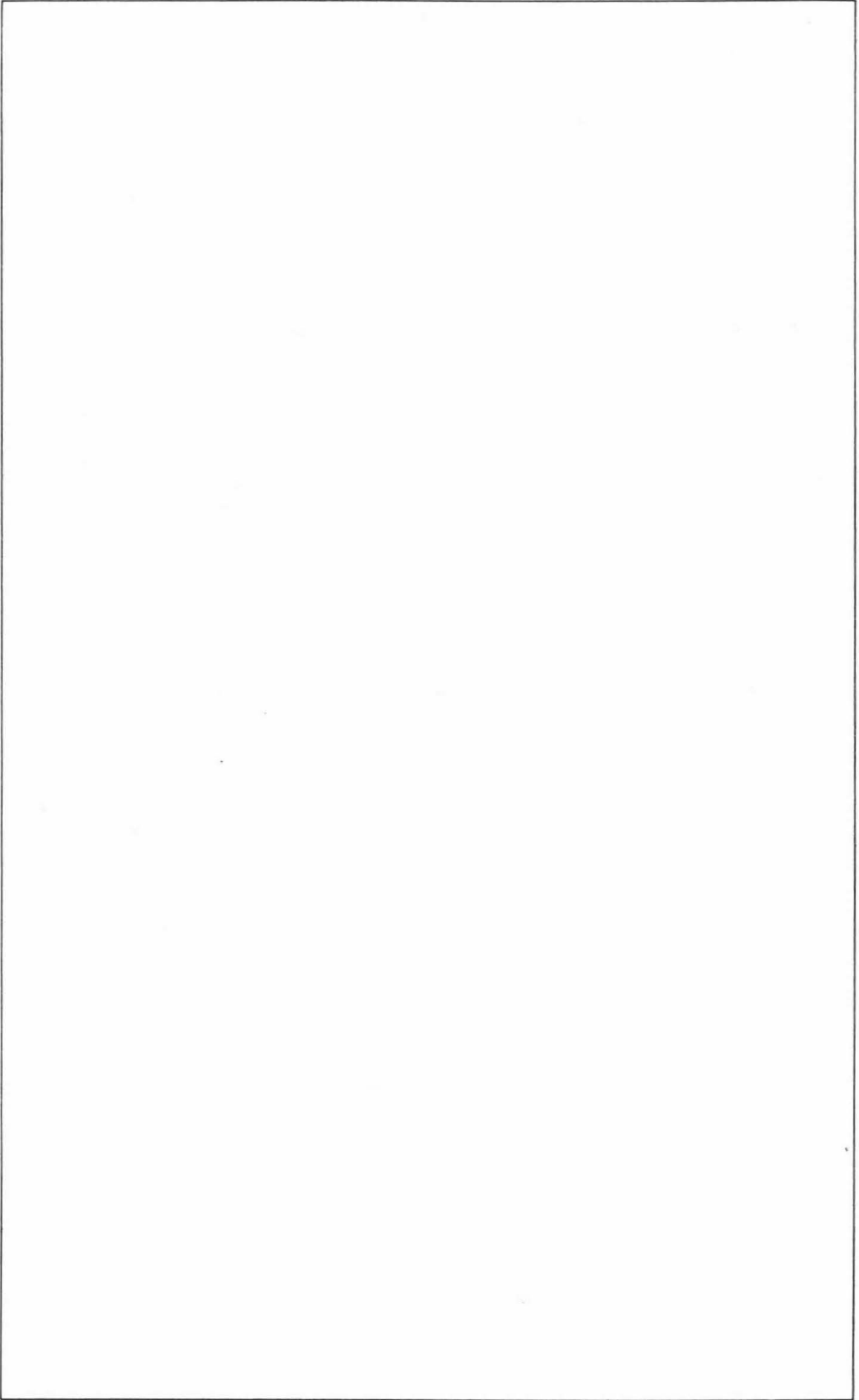
Position			NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ				
h	m	o				
23	42.0	+ 21 40		15.6		diffuse
23	42.2	+ 21 44		15.6		diffuse
23	43.0	+ 27 06	7747	14.5		
23	43.3	+ 27 04		15.5		compact
23	43.3	+ 27 20		15.3		diffuse
23	45.2	+ 27 09		15.3		
23	45.3	+ 27 24		15.7		compact
23	45.5	+ 27 06		15.0		
23	45.8	+ 23 49		15.7		diffuse
23	46.0	+ 24 19		15.4		compact
23	46.3	+ 22 25		15.7		diffuse
23	46.3	+ 25 57		15.2		diffuse
23	46.5	+ 26 31		14.8		
23	48.1	+ 24 16		15.6		
23	48.2	+ 26 54	7765	15.7		
23	48.2	+ 27 01		14.9		
23	48.3	+ 26 49	7767=1511*	14.2		
23	48.3	+ 26 51	7766	15.7		compact
23	48.4	+ 26 53	7768	14.0		
23	48.4	+ 26 57		15.5		
23	48.7	+ 27 01		15.7		compact
23	48.8	+ 24 23		15.7		
23	48.9	+ 26 57		15.7		compact
23	49.4	+ 27 04		15.7		
23	50.2	+ 26 52		15.4		

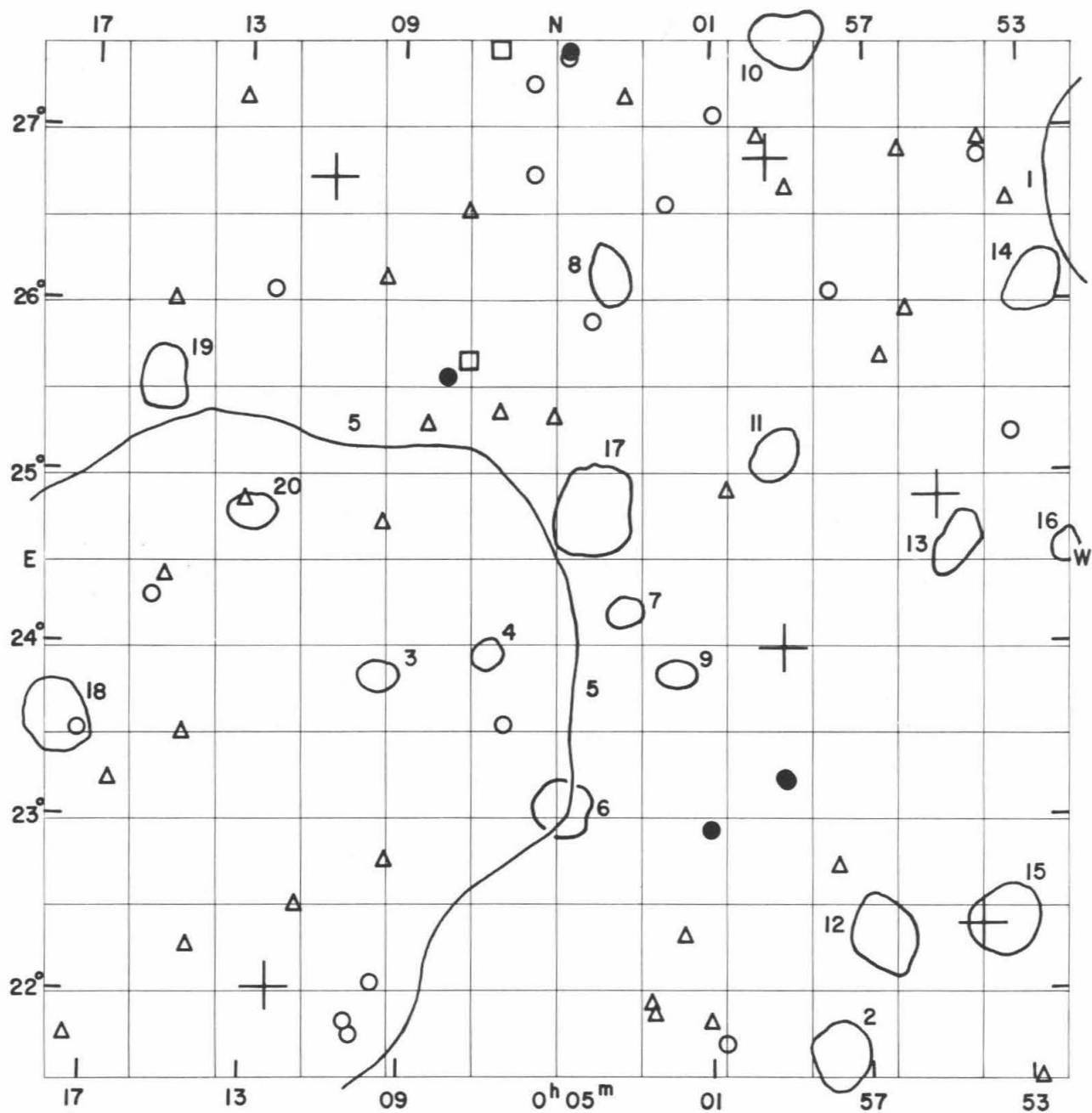
Position a 1950 δ				NGC IC*	m_p	V_s km/sec	Remarks
h	m	o	'				
23	50.7	+	24 40		15.6		
23	50.7	+	27 25		15.5		
23	51.2	+	27 08		15.3		
23	52.7	+	21 29	7784	15.5		compact *)
23	53.3	+	25 14		15.0		double system, connected
23	53.3	+	26 35		15.6		
23	54.0	+	26 55		15.6		
23	54.1	+	26 50		14.7		
23	56.0	+	25 56		15.6		very diffuse
23	56.1	+	26 52		15.7		
23	56.7	+	25 39		15.5		
23	57.8	+	22 43		15.1		double system with jet
23	58.0	+	26 03		14.7		
23	59.0	+	26 39		15.6		
23	59.1	+	23 13		13.2		} interacting double system
23	59.2	+	23 14		13.9		
23	59.8	+	26 56		15.5		
0	00.6	+	21 42		14.4		
0	00.6	+	24 54		15.5		very compact
0	00.9	+	27 05		15.0		
0	01.0	+	21 49		15.7		
0	01.0	+	22 56		14.0		
0	01.7	+	22 19		15.4		
0	02.2	+	26 33		14.6		
0	02.4	+	21 52		15.6		compact
0	02.5	+	21 55		15.7		
0	03.2	+	27 10		15.2		
0	04.1	+	25 53		14.9		
0	04.6	+	27 26	1	13.4		
0	04.7	+	27 24	2	14.8		
0	05.1	+	25 18		15.5		
0	05.6	+	26 44		14.4		
0	05.6	+	27 15		14.7		
0	06.3	+	23 33	9	14.5		
0	06.4	+	25 21		15.7		extremely diffuse
0	06.4	+	27 27	16	12.5	+ 3110	$m_H = 13.0$
0	07.3	+	25 39	23	12.5	+ 4568	$m_H = 12.7$
0	07.3	+	26 31		15.5		double nebula
0	07.8	+	25 33	26	13.9		

*) This galaxy is located outside the $6^\circ \times 6^\circ$ area of this field and also of the adjacent fields Nos. 455 and 456 of Vol. V.

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
16	-	-	13.20	SB0	13.2	SB0	-	-
23	-	-	12.88	Sb	13.0	Sb	-	-





FIELD No. 478

$0^h 05^m + 24^\circ 30'$

Survey Plate No. 205

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	°	'	"	
33208	23	54	08.4	+ 22	22	11	6.30
33230	23	55	12.4	+ 24	51	49	4.75
33324	23	59	09.0	+ 23	58	30	6.81
33334	23	59	33.2	+ 26	49	03	5.85
243	0	10	48.4	+ 26	42	35	6.30
281	0	12	20.4	+ 22	00	23	6.05

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
2335.5 + 2449	medium compact	970	32.3	Near	1
2351.9 + 2434	medium compact	33	0.9	ED	16
2352.7 + 2607	medium compact	103	1.8	VD	14
2353.6 + 2224	medium compact	71	2.1	ED	15
2354.7 + 2436	open	88	1.5	ED	13
2356.6 + 2219	open	96	2.2	ED	12
2357.7 + 2137	medium compact	73	1.9	VD	2
2359.0 + 2731	medium compact	53	1.9	ED	10
2359.4 + 2506	compact	55	1.5	ED	11
0001.9 + 2351	medium compact	35	1.1	ED	9
0003.2 + 2410	compact	33	1.1	ED	7
0003.7 + 2608	compact	60	1.6	ED	8
0004.0 + 2446	medium compact	95	2.7	ED	17
0004.8 + 2304	medium compact	57	1.8	ED	6
0006.8 + 2357	medium compact	65	1.0	ED	4
0009.5 + 2349	medium compact	45	1.1	ED	3
0012.8 + 2446	medium compact	40	1.3	ED	20
0014.5 + 2315	open	245	23.6	Near	5
0015.1 + 2531	medium compact	89	1.6	ED	19
0017.7 + 2333	medium compact	141	2.2	ED	18

Average number of galaxies per cluster = 122.4

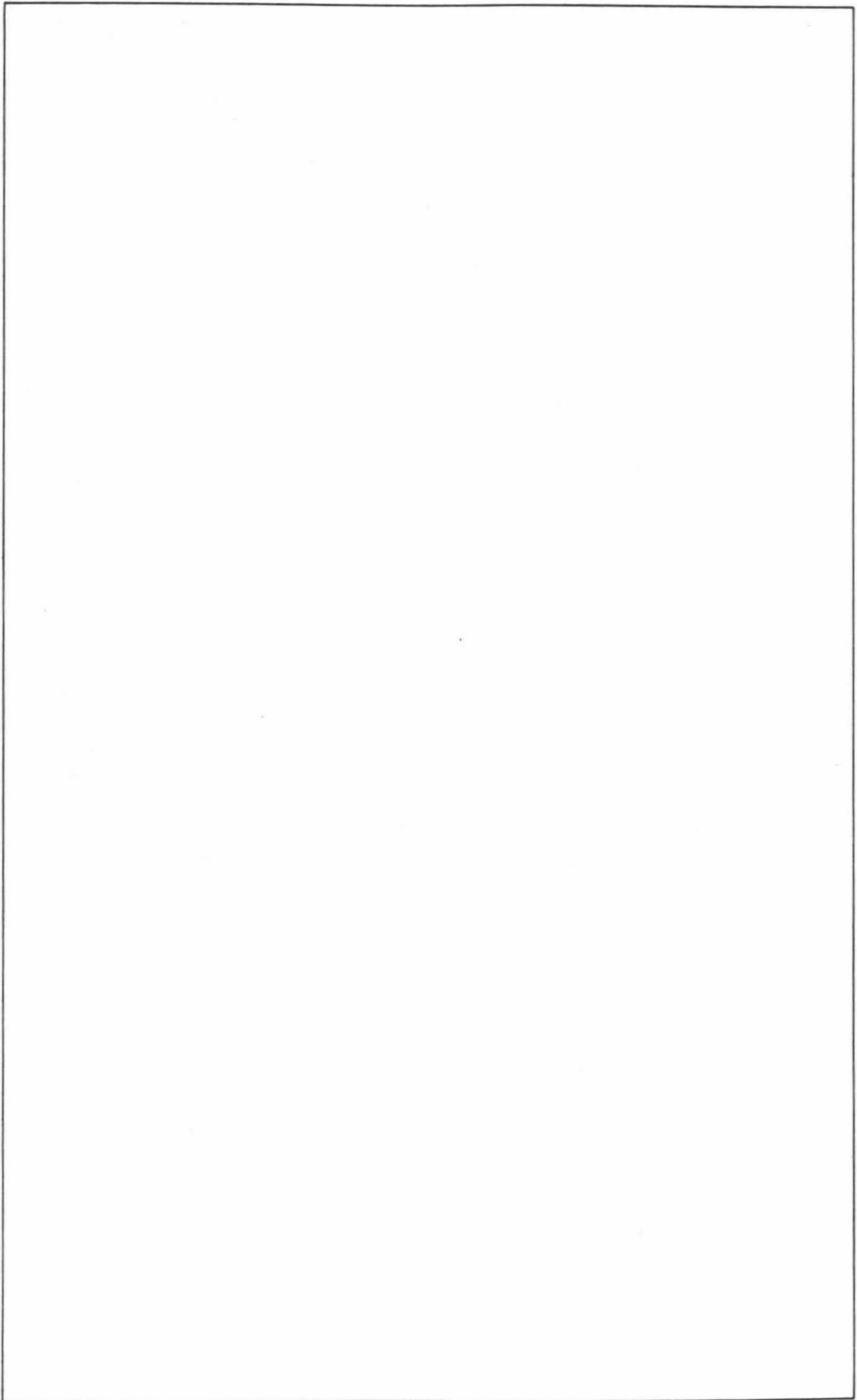
GALAXIES

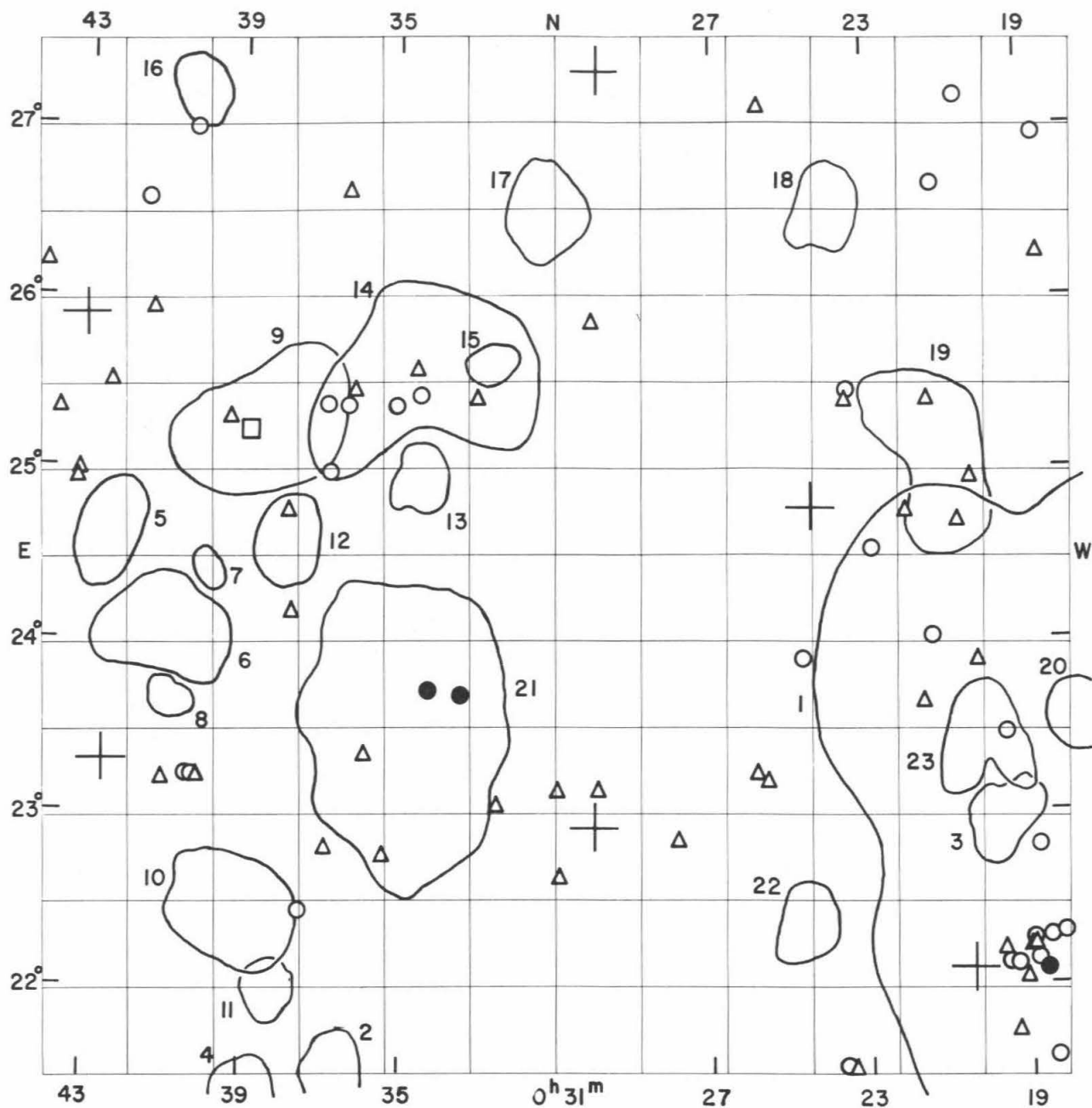
Position α 1950 δ	NGC IC*	m _p	V _s km/sec	Remarks
h m o s				
23 52.7 + 21 29	7784	15.5		compact
23 53.3 + 25 14		15.0		double system, connected
23 53.3 + 26 35		15.6		
23 54.0 + 26 55		15.6		
23 54.1 + 26 50		14.7		
23 56.0 + 25 56		15.6		very diffuse
23 56.1 + 26 52		15.7		
23 56.7 + 25 39		15.5		
23 57.8 + 22 43		15.1		double system with jet
23 58.0 + 26 03		14.7		
23 59.0 + 26 39		15.6		
23 59.1 + 23 13		13.2		} interacting double system
23 59.2 + 23 14		13.9		
23 59.8 + 26 56		15.5		
0 00.6 + 21 42		14.4		
0 00.6 + 24 54		15.5		very compact
0 00.9 + 27 05		15.0		
0 01.0 + 21 49		15.7		
0 01.0 + 22 56		14.0		
0 01.7 + 22 19		15.4		
0 02.2 + 26 33		14.6		
0 02.4 + 21 52		15.6		compact
0 02.5 + 21 55		15.7		
0 03.2 + 27 10		15.2		
0 04.1 + 25 53		14.9		
0 04.6 + 27 26	1	13.4		
0 04.7 + 27 24	2	14.8		
0 05.1 + 25 18		15.5		

Position			NGC IC*	m_p	V_s km/sec	Remarks
α	1950	δ				
h	m	o				
0	05.6	+ 26 44		14.4		
0	05.6	+ 27 15		14.7		
0	06.3	+ 23 33	9	14.5		
0	06.4	+ 25 21		15.7		extremely diffuse
0	06.4	+ 27 27	16	12.5	+3110	$m_H = 13.0$
0	07.3	+ 25 39	23	12.5	+4568	$m_H = 12.7$
0	07.3	+ 26 31		15.5		double nebula
0	07.8	+ 25 33	26	13.9		
0	08.3	+ 25 17		15.4		
0	09.3	+ 22 45		15.7		
0	09.4	+ 26 07		15.3		
0	09.5	+ 24 43		15.7		
0	09.7	+ 22 03		14.9		
0	10.2	+ 21 46	41	14.6		
0	10.3	+ 21 50	42	15.0		
0	11.6	+ 22 30		15.6		compact
0	12.3	+ 26 03		14.8		
0	13.1	+ 24 51		15.7		
0	13.1	+ 27 10		15.4		
0	14.3	+ 22 15		15.1		
0	14.4	+ 23 28		15.7		
0	14.9	+ 25 59		15.4		
0	15.0	+ 24 23		15.4		
0	15.3	+ 24 17		14.8		
0	16.4	+ 23 12		15.3		
0	17.2	+ 23 30	1540*	14.9		
0	17.4	+ 21 44	1541*	15.5		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
16	-	-	13.20	SB0	13.2	SB0	-	-
23	-	-	12.88	Sb	13.0	Sb	-	-





FIELD No. 479

$0^{\text{h}}31^{\text{m}} + 24^{\circ}30'$

Survey Plate No. 1188

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	o	'	"	
456	0	20	23.1	+	22	06 04	7.58
527	0	24	27.0	+	24	45 56	6.72
640	0	29	56.0	+	27	18 18	6.54
643	0	30	01.4	+	22	55 02	7.00
898	0	42	33.6	+	23	19 03	7.26
911	0	43	06.4	+	25	54 00	7.86

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0014.5 + 2315	open	245	23.6	Near	1
0017.7 + 2333	medium compact	141	2.2	ED	20
0019.6 + 2258	compact	91	2.2	VD	3
0020.0 + 2324	medium compact	120	3.1	VD	23
0021.2 + 2504	medium compact	120	4.4	D	19
0023.8 + 2631	medium compact	105	2.5	ED	18
0024.6 + 2222	compact	104	2.2	ED	22
0031.2 + 2629	medium compact	106	2.8	ED	17
0032.6 + 2536	medium compact	75	1.4	ED	15
0034.4 + 2456	medium compact	64	2.0	VD	13
0034.4 + 2532	open	101	6.0	Near	14
0034.8 + 2329	open	181	7.8	MD	21
0036.6 + 2129	compact	124	2.4	ED	2
0037.8 + 2434	medium compact	72	2.4	ED	12
0038.2 + 2159	medium compact	68	1.8	VD	11
0038.4 + 2515	compact	207	5.0	VD	9
0038.7 + 2107	compact	129	3.6	MD	4
0039.1 + 2227	medium compact	94	3.9	D	10
0039.8 + 2425	medium compact	69	1.1	ED	7
0040.2 + 2714	open	85	2.0	VD	16
0040.8 + 2342	medium compact	70	1.3	ED	8
0040.8 + 2404	open	97	3.7	D	6
0042.4 + 2437	medium compact	139	2.8	ED	5

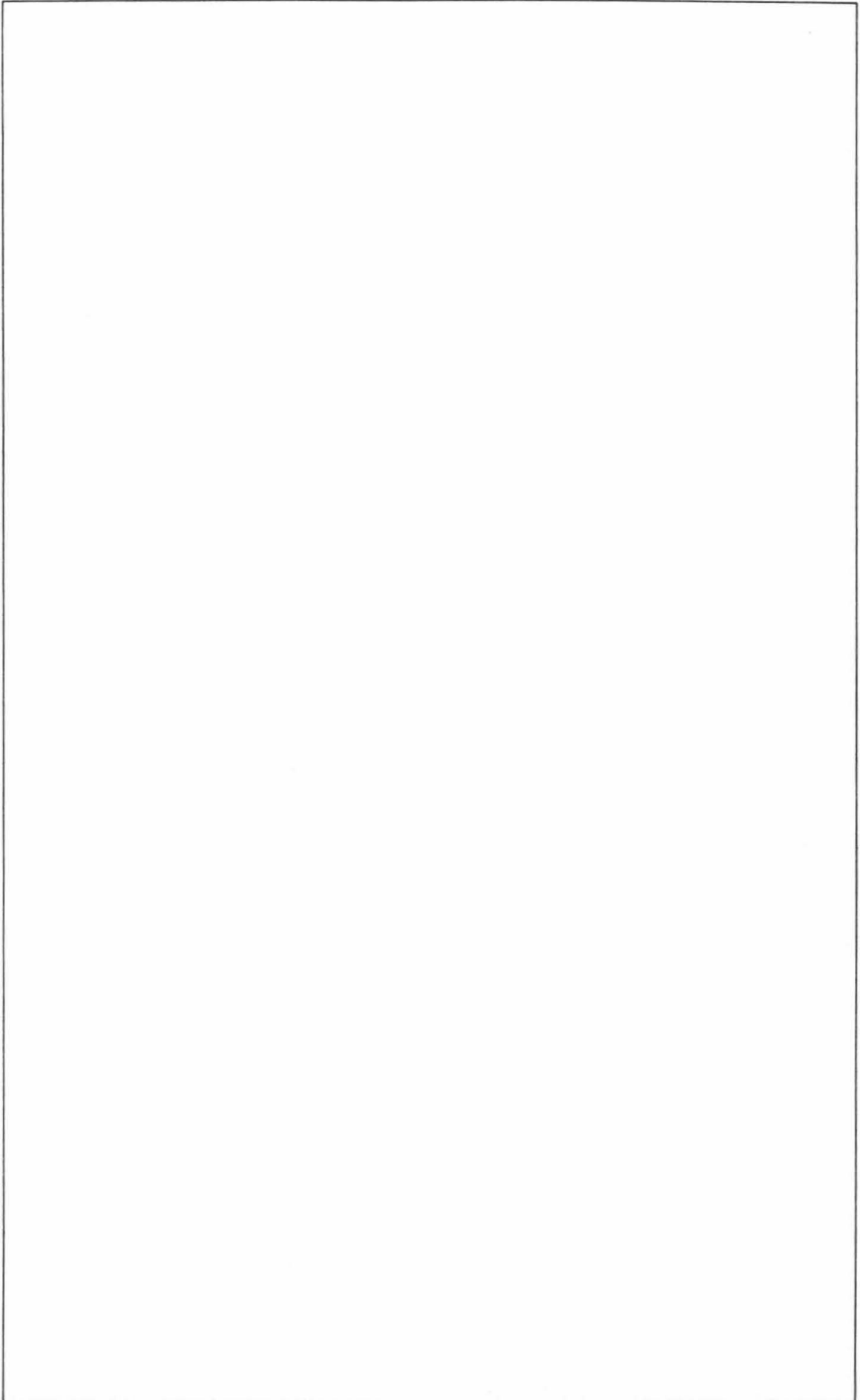
Average number of galaxies per cluster = 113.3

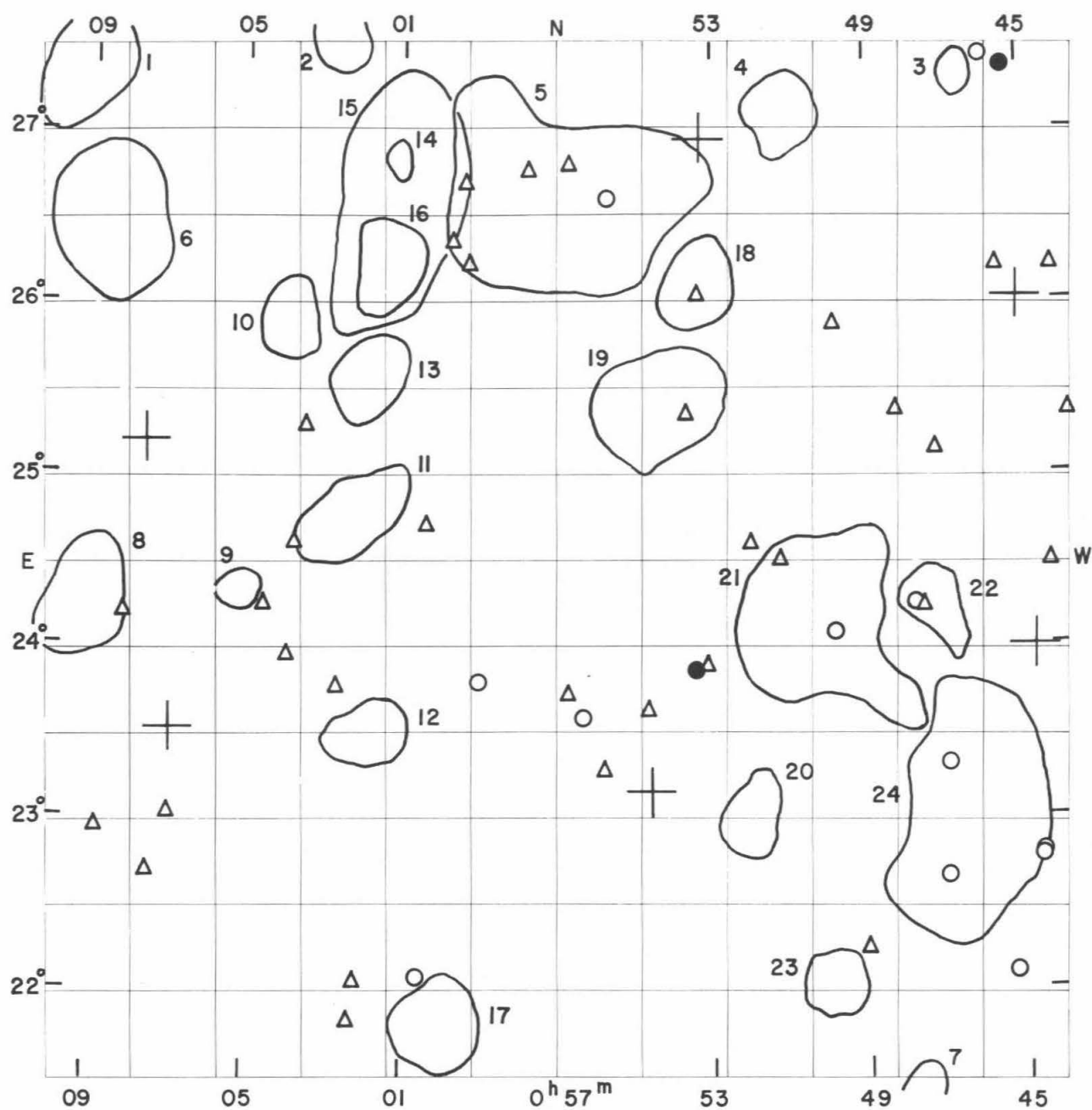
GALAXIES

Position α 1950 δ			NGC IC*	m _p	V _s km/sec	Remarks
h	m	o				
0	18.1	+ 22 20	1542*	15.0		
0	18.3	+ 21 36	1543*	14.2		
0	18.4	+ 22 18	79	14.9		compact
0	18.5	+ 26 14		15.5		
0	18.5	+ 26 57		14.5		
0	18.6	+ 22 05	80	13.7	+ 5586	
0	18.7	+ 22 50	1544*	14.6		
0	18.8	+ 22 09	83	14.3	+ 6541	
0	18.8	+ 22 14	85	15.7		
0	18.9	+ 22 14	1546*	15.6		
0	18.9	+ 22 18	86	14.9		
0	19.1	+ 22 02		15.7		
0	19.2	+ 22 08	91	14.5		
0	19.3	+ 21 44	1548*	15.6		very compact
0	19.4	+ 22 08	93	14.7		
0	19.4	+ 23 28		15.0		
0	19.6	+ 22 12	94	15.6		northern of two
0	20.2	+ 23 53		15.4		
0	20.3	+ 24 57		15.6		
0	20.6	+ 27 10		14.5		
0	20.7	+ 24 40		15.5		
0	21.2	+ 26 40		14.7		compact
0	21.3	+ 24 02		14.8		
0	21.4	+ 25 23		15.2		double system
0	21.6	+ 23 38		15.7		

Position a 1950 δ			NGC IC*	m_p	V_s km/sec	Remarks
h	m	o ' "				
0	22.0	+ 24 44		15.7		
0	22.9	+ 24 33		14.9		
0	23.4	+ 21 31		15.7		diffuse
0	23.4	+ 25 27		14.9		
0	23.5	+ 25 23		15.7		
0	23.6	+ 21 32	109	15.0		
0	24.6	+ 23 54		14.8		
0	25.6	+ 23 10		15.7		
0	25.7	+ 27 07		15.3		
0	25.8	+ 23 14		15.6		compact
0	27.9	+ 22 51		15.7		
0	29.9	+ 23 08		15.4		
0	30.1	+ 25 51		15.7		
0	30.9	+ 22 38		15.7		
0	31.0	+ 23 08		15.4		
0	32.5	+ 23 03		15.1		
0	33.0	+ 25 24		15.7		
0	33.4	+ 23 41	160	13.7	+ 5255	
0	34.2	+ 23 43	169+1559*	13.3		double system
0	34.4	+ 25 25		14.8		compact
0	34.5	+ 25 34		15.3		very compact
0	35.1	+ 25 22		15.0		compact
0	35.4	+ 22 45		15.7		
0	35.9	+ 23 20		15.5		
0	36.1	+ 25 26		15.6		
0	36.3	+ 25 22		14.6		
0	36.3	+ 26 37		15.3		
0	36.8	+ 22 48		15.7		
0	36.8	+ 24 59		15.0		
0	36.8	+ 25 22		14.5		compact
0	37.5	+ 22 26		14.5		
0	37.7	+ 24 10		15.3		compact
0	37.8	+ 24 45		15.1		very compact
0	38.8	+ 25 13	214	13.0	+ 4521	$m_H = 12.8$ S
0	39.3	+ 25 18		15.4		
0	40.1	+ 23 13		15.7		
0	40.2	+ 23 14	228	14.9		
0	40.3	+ 26 59	46*	14.7		
0	40.4	+ 23 14	229	14.7		
0	41.0	+ 23 12		15.1		compact
0	41.4	+ 25 55		15.3		
0	41.5	+ 26 35		14.8		
0	42.4	+ 25 30		15.6		
0	43.2	+ 24 59		15.4		
0	43.3	+ 24 56		15.1		
0	43.8	+ 25 21		15.6		
0	44.2	+ 26 13		15.7		very diffuse

MAGNITUDES AND TYPES FROM OTHER SOURCES							
NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958
80	-	-	14.05	S0	13.9	S0	- -
83	-	-	14.48	E0	14.3	E0	- -
160	-	-	13.73	Sa	13.7	Sa	- -
214	-	-	12.94	Sc	12.8	Sc	- -





CLUSTERS OF GALAXIES

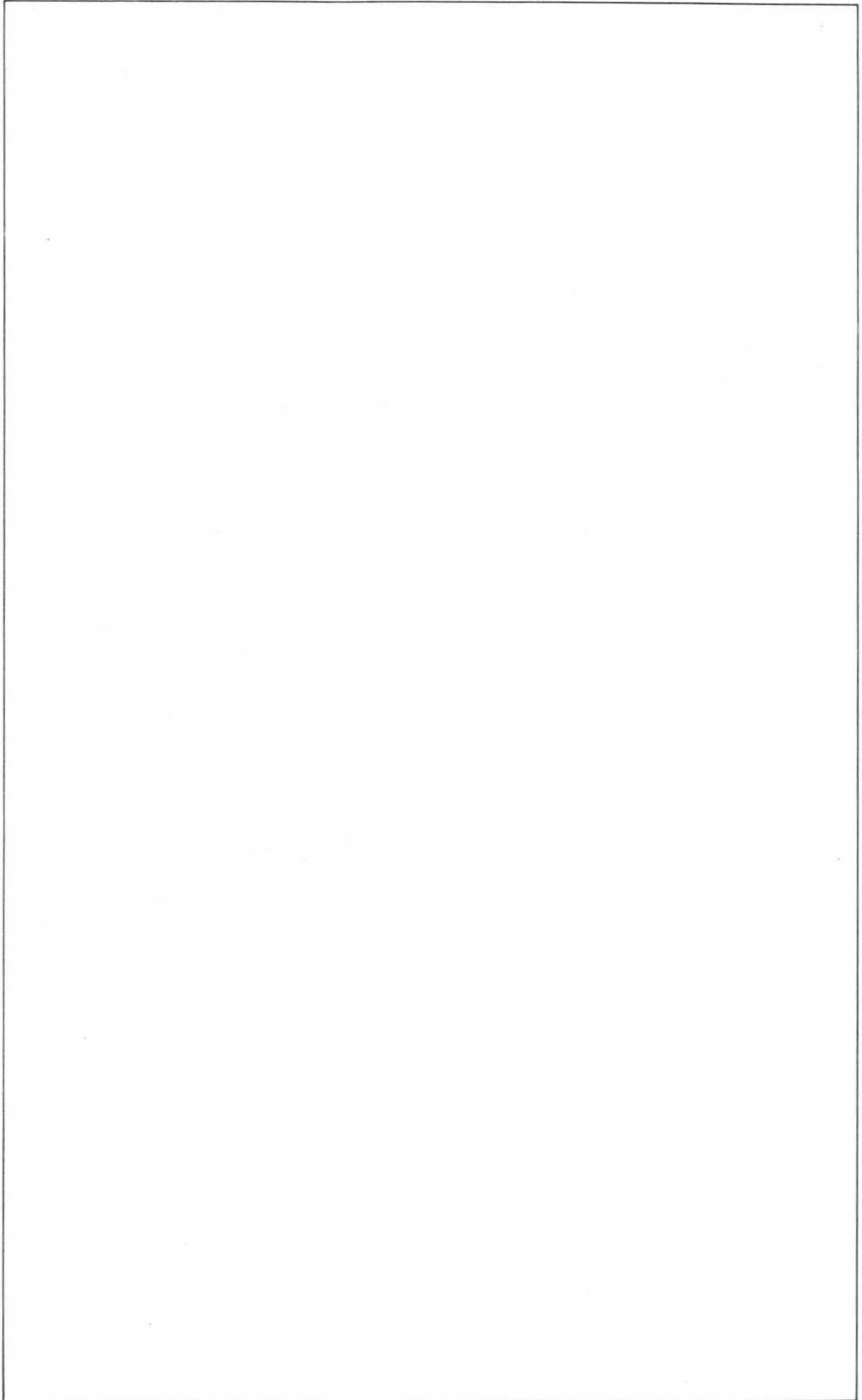
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0046.5 + 2300	medium compact	106	6.2	Near	24
0046.6 + 2718	compact	43	1.2	ED	3
0047.1 + 2413	compact	86	2.1	MD	22
0047.7 + 2122	open	70	1.8	ED	7
0049.9 + 2201	compact	104	2.1	ED	23
0050.2 + 2406	medium compact	110	5.5	MD	21
0051.1 + 2705	open	72	2.4	VD	4
0051.9 + 2258	medium compact	110	2.1	ED	20
0053.4 + 2604	compact	92	2.4	ED	18
0054.4 + 2523	medium compact	103	3.8	VD	19
0056.9 + 2636	medium compact	145	7.0	Near	5
0100.0 + 2147	medium compact	64	2.9	VD	17
0101.0 + 2648	compact	59	0.9	ED	14
0101.1 + 2634	medium compact	91	5.7	D	15
0101.3 + 2611	medium compact	93	2.5	ED	16
0101.8 + 2329	compact	86	2.3	ED	12
0101.9 + 2532	compact	97	2.4	ED	13
0102.2 + 2445	compact	290	3.1	ED	11
0102.7 + 2733	compact	86	2.1	ED	2
0103.9 + 2552	compact	116	2.2	ED	10
0105.1 + 2419	medium compact	40	1.2	ED	9
0108.6 + 2627	medium compact	178	4.2	VD	6
0109.1 + 2415	medium compact	76	3.2	VD	8
0109.4 + 2724	medium compact	84	3.4	VD	1

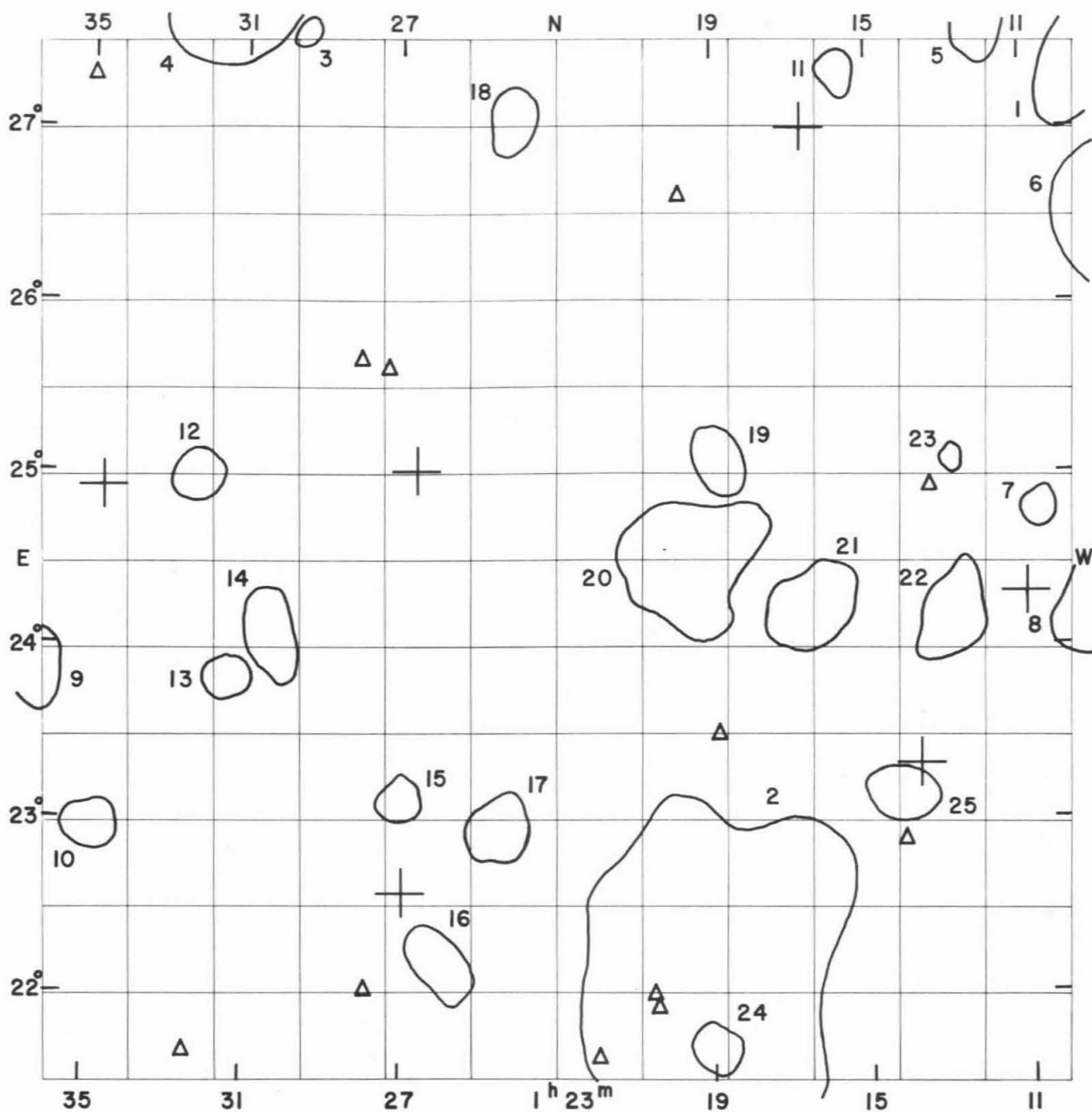
Average number of galaxies per cluster = 100.0

GALAXIES

Position			NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ				
h	m	s				
0	43.8	+ 25 21		15.6		
0	44.2	+ 26 13		15.7		very diffuse
0	44.3	+ 24 29		15.5		
0	44.5	+ 22 48	1583*	15.0		compact
0	44.6	+ 22 47	1585*	14.9		compact
0	45.3	+ 22 06	1586*	14.9		
0	45.3	+ 27 21	252	13.4		
0	45.6	+ 26 12		15.6		
0	45.9	+ 27 25	260	14.3		
0	46.9	+ 23 18		14.7		multiple system
0	47.0	+ 22 40		14.5		
0	47.2	+ 25 08		15.7		
0	47.5	+ 24 13		15.6		
0	47.7	+ 24 15		15.0		
0	48.2	+ 25 21		15.7		
0	49.0	+ 22 15		15.7		
0	49.8	+ 24 05	280	14.6		
0	49.8	+ 25 52		15.5		
0	51.2	+ 24 30		15.3		
0	52.0	+ 24 36		15.5		
0	53.1	+ 23 53		15.4		
0	53.3	+ 26 02		15.7		
0	53.4	+ 23 51	304	14.0		
0	53.7	+ 25 20		15.6		

Position				NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ					
h	m	o	i				
0	54.6	+	23 37		15.2		
0	55.7	+	26 36	326	14.9		
0	55.8	+	23 16		15.4		
0	56.3	+	23 35		14.5		
0	56.7	+	23 42		15.7		
0	56.7	+	26 47		15.6		
0	57.8	+	26 45		15.7		diffuse
0	59.0	+	23 47		14.7		
0	59.3	+	26 13		15.6		compact
0	59.4	+	26 41		15.7		
0	59.7	+	26 21		15.7		
1	00.4	+	24 42		15.7		very diffuse
1	00.6	+	22 05	354	14.2		
1	02.1	+	22 03		15.6		
1	02.3	+	21 50		15.7		
1	02.6	+	23 46		15.6		
1	03.4	+	25 17		15.5		
1	03.8	+	24 36		15.7		compact
1	03.9	+	23 57		15.7		
1	04.5	+	24 15		15.6		
1	06.9	+	23 02		15.7		
1	07.4	+	22 41		15.6		
1	08.1	+	24 11		15.4		
1	08.8	+	22 57		15.5		double system





FIELD No. 481

$1^h 23^m + 24^{\circ} 30'$

Survey Plate No. 1229

GC STARS

Nos.	R.A.			Decl.	m_p
	h	m	s		
1474	1	11	01.7	+ 24 19 10	4.64
1526	1	13	44.6	+ 23 19 34	6.51
1591	1	16	42.7	+ 27 00 07	4.67
1799	1	26	37.8	+ 25 01 02	6.76
1801	1	26	56.9	+ 22 34 06	6.75
1958	1	34	39.3	+ 24 54 58	7.10

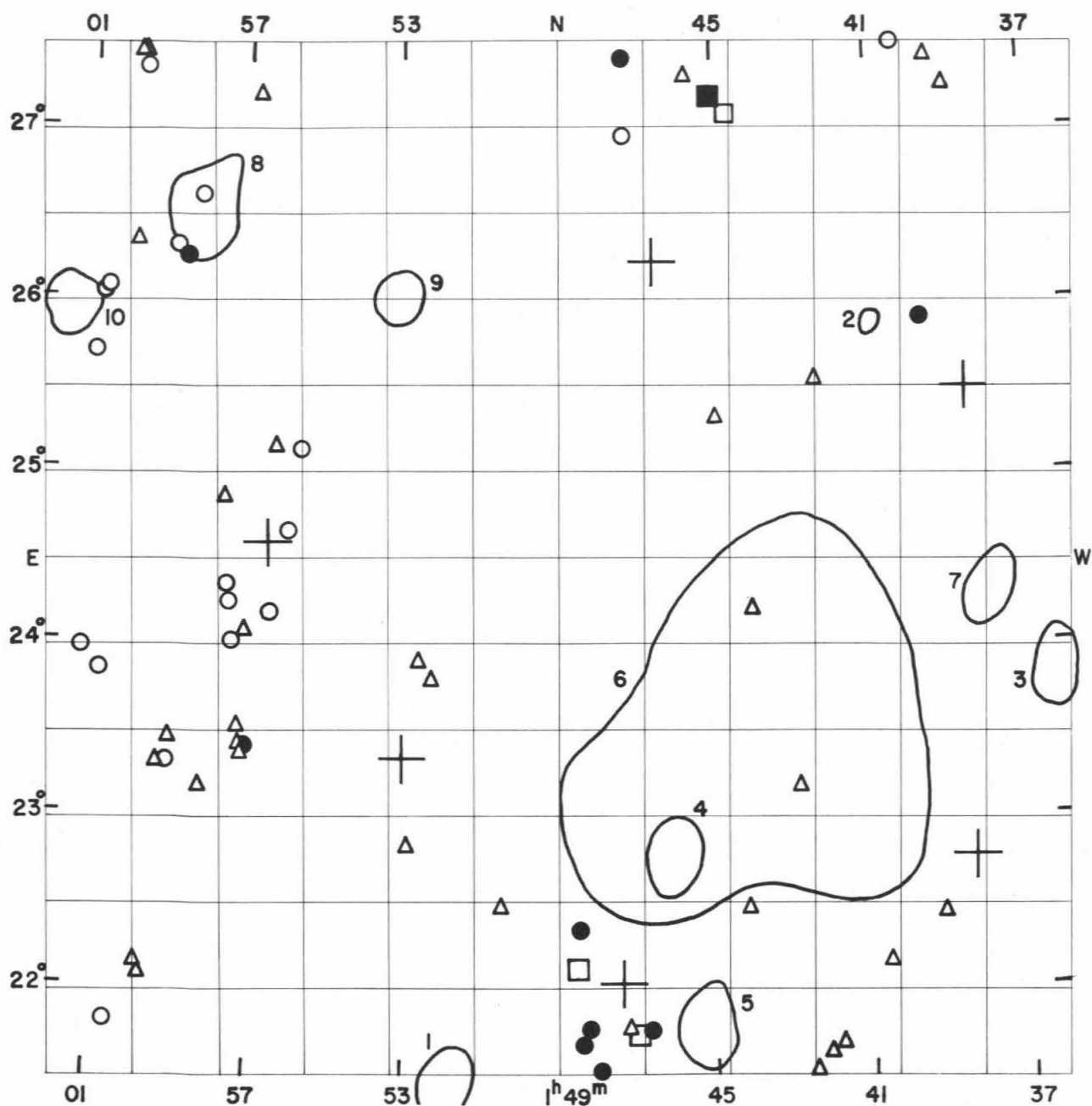
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0108.6 + 2627	medium compact	178	4.2	VD	6
0109.1 + 2415	medium compact	76	3.2	VD	8
0109.4 + 2724	medium compact	84	3.4	VD	1
0110.6 + 2448	compact	35	1.1	ED	7
0112.0 + 2732	open	82	1.8	ED	5
0112.8 + 2505	compact	34	0.8	ED	23
0112.9 + 2410	medium compact	161	2.5	VD	22
0114.2 + 2308	compact	70	2.0	ED	25
0115.8 + 2719	open	69	1.3	ED	11
0116.4 + 2413	medium compact	75	2.7	VD	21
0118.8 + 2505	compact	52	1.9	ED	19
0118.9 + 2141	open	64	1.6	ED	24
0119.1 + 2204	open	102	9.6	MD	2
0119.6 + 2428	open	99	4.2	D	20
0124.1 + 2703	medium compact	63	1.7	VD	18
0124.4 + 2256	medium compact	102	2.1	VD	17
0125.9 + 2209	medium compact	115	2.1	ED	16
0126.9 + 2306	medium compact	65	1.4	ED	15
0129.5 + 2731	medium compact	40	0.9	ED	3
0130.2 + 2404	open	73	2.3	VD	14
0131.2 + 2752	medium compact	105	5.3	MD	4
0131.3 + 2349	compact	70	1.4	ED	13
0132.1 + 2459	compact	76	1.6	ED	12
0134.8 + 2257	medium compact	94	1.6	ED	10
0136.2 + 2350	medium compact	107	2.0	ED	9

Average number of galaxies per cluster = 83.6

GALAXIES

Position			NGC IC*	m _p	V _s km/sec	Remarks
α 1950	δ					
h m	o	'				
1 13.4	+ 24	55		15.4		
1 14.1	+ 22	52		15.7		
1 18.8	+ 23	30		15.7		
1 19.9	+ 26	36		15.2		double system
1 20.4	+ 21	55		15.7		
1 20.5	+ 22	00		15.7		
1 21.9	+ 21	37		15.7		
1 27.3	+ 25	36		15.3		diffuse
1 27.9	+ 22	00		15.7		
1 28.0	+ 25	39		15.6		
1 32.3	+ 21	39		15.3		
1 35.0	+ 27	17		15.7		



FIELD No. 482

$1^h 49^m + 24^\circ 30'$

Survey Plate No. 896

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	°	'	"	
2039	1	38	21.5	+	22	46 24	7.56
2042	1	38	30.6	+	25	29 38	6.26
2207	1	46	38.4	+	26	13 30	6.73
2216	1	47	22.4	+	22	01 40	6.2
2323	1	53	03.3	+	23	19 59	5.95
2389	1	56	30.0	+	24	35 11	7.8

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0136.2 + 2350	medium compact	107	2.0	ED	3
0137.9 + 2418	medium compact	71	1.9	ED	7
0140.9 + 2551	compact	42	0.6	ED	2
0143.8 + 2323	medium compact	174	11.4	Near	6
0145.2 + 2146	open	104	2.2	ED	5
0146.0 + 2246	medium compact	93	2.1	ED	4
0151.9 + 2125	medium compact	88	1.9	ED	1
0153.1 + 2600	compact	63	1.6	ED	9
0158.1 + 2630	medium compact	68	2.6	VD	8
0201.7 + 2557	medium compact	89	1.9	ED	10

Average number of galaxies per cluster = 89.9

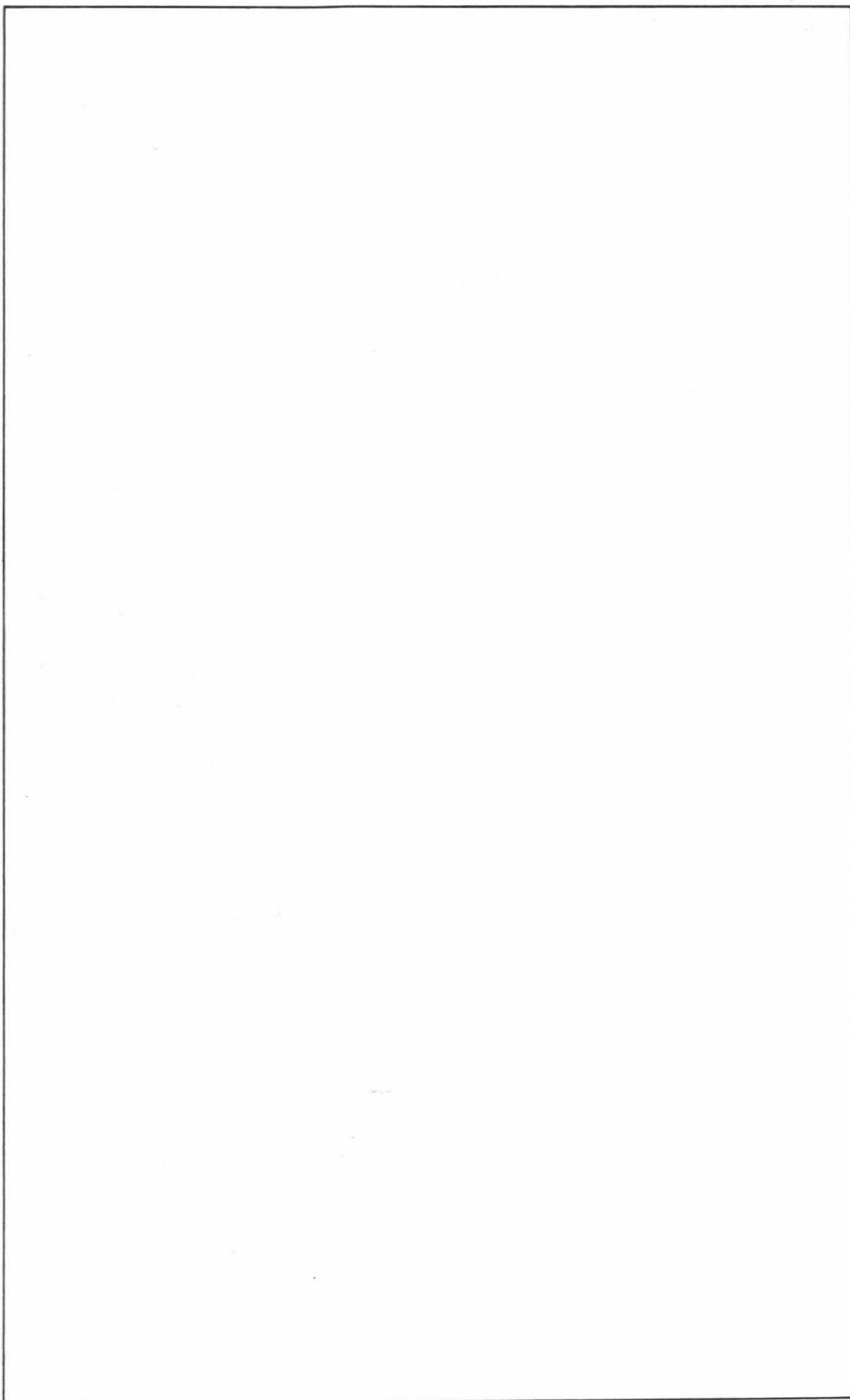
GALAXIES

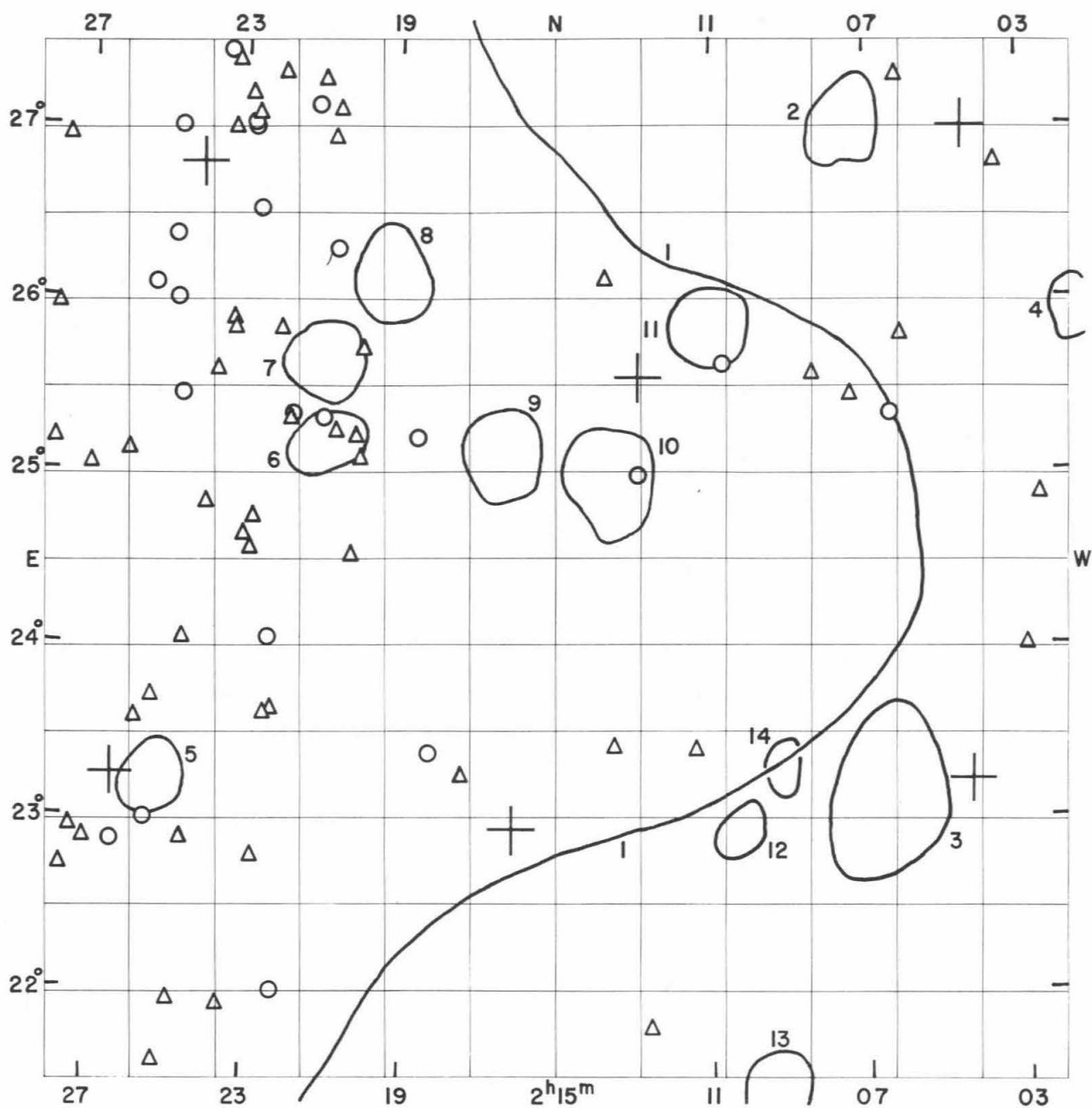
Position			NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ				
h	m	o				
1	38.9	+ 27 15		15.7		
1	39.2	+ 22 26		15.7		
1	39.4	+ 27 25		15.3		
1	39.6	+ 25 53	656	13.5		
1	40.3	+ 27 30		14.8		
1	40.6	+ 22 10		15.7		
1	41.8	+ 21 40		15.3		
1	42.1	+ 21 38		15.2		
1	42.4	+ 21 31	1725*	15.3		
1	42.4	+ 25 32		15.4		
1	42.8	+ 23 11		15.7		
1	44.0	+ 24 13		15.5		
1	44.1	+ 22 29		15.7		compact
1	44.6	+ 27 05	1727*	12.2	+ 362	
1	45.0	+ 25 19		15.2		
1	45.0	+ 27 11	672	11.4	+ 340	m _H = 11.9 Sb double system
1	45.7	+ 27 18		15.3		
1	46.7	+ 21 45	678	13.3		
1	47.0	+ 21 43	680	13.0		
1	47.2	+ 21 46	1730*	15.5		
1	47.3	+ 26 57	1731*	14.2		
1	47.3	+ 27 24	684=165*	13.2		
1	47.9	+ 21 30	691	13.5		
1	48.2	+ 21 45	694	13.9		
1	48.3	+ 21 40	167*	14.0		
1	48.4	+ 22 20	695	13.7		
1	48.5	+ 22 06	697	12.7		
1	50.4	+ 22 29	1742*	15.2		
1	52.3	+ 23 48		15.6		compact
1	52.6	+ 23 54		15.7		
1	52.9	+ 22 50		15.7		
1	55.6	+ 25 07		14.3		
1	56.0	+ 24 39	765	14.2		
1	56.3	+ 25 09		15.6		very diffuse
1	56.4	+ 24 10		14.8		
1	56.8	+ 27 12		15.2		
1	57.1	+ 23 24	776	13.4		
1	57.1	+ 24 04		15.6		

Position			NGC IC*	m_p	V_s km/sec	Remarks
α h m	1950	δ ° ' "				
1 57.2		+ 23 22	180*	15.3		
1 57.2		+ 23 25		15.7		compact
1 57.3		+ 23 31		15.6		compact
1 57.4		+ 24 00		14.6		
1 57.4		+ 24 14		14.8		
1 57.6		+ 24 20	1764*	14.5		
1 57.6		+ 24 50		15.7		compact
1 58.2		+ 23 11		15.2		
1 58.3		+ 26 36		14.8		
1 58.7		+ 26 15		13.9		
1 58.9		+ 26 18		14.4		
1 59.0		+ 23 27		15.5		
1 59.1		+ 23 19	189*	14.9		
1 59.3		+ 23 19	190*	15.1		
1 59.7		+ 22 05		15.7		
1 59.8		+ 22 08		15.7		
1 59.8		+ 27 20		15.0		
1 59.8		+ 27 26		15.6		compact
1 59.9		+ 26 20		15.4		
1 59.9		+ 27 26		15.3		compact
2 00.6		+ 21 48		15.0		
2 00.7		+ 26 04		14.6		
2 00.8		+ 23 50		14.1		
2 00.8		+ 26 02		14.9		
2 01.0		+ 25 41		14.7		
2 01.2		+ 23 58		14.7		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
672	-	-	11.61	SBc	11.4	SBc	11.31	Sc+
1727*	-	-	12.70	SBc	12.3	Sc	12.10	Ir. I





FIELD No. 483

$2^{\text{h}}15^{\text{m}} + 24^{\circ}30'$

Survey Plate No. 858

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	o	i	"	
2538	2	04	20.9	+	23	13 37	2.23
2539	2	04	29.2	+	27	00 02	6.82
2707	2	12	53.9	+	25	33 07	5.84
2786	2	16	08.2	+	22	56 17	6.42
2940	2	24	13.4	+	26	47 22	6.18
2974	2	26	22.2	+	23	14 48	6.10

CLUSTERS OF GALAXIES

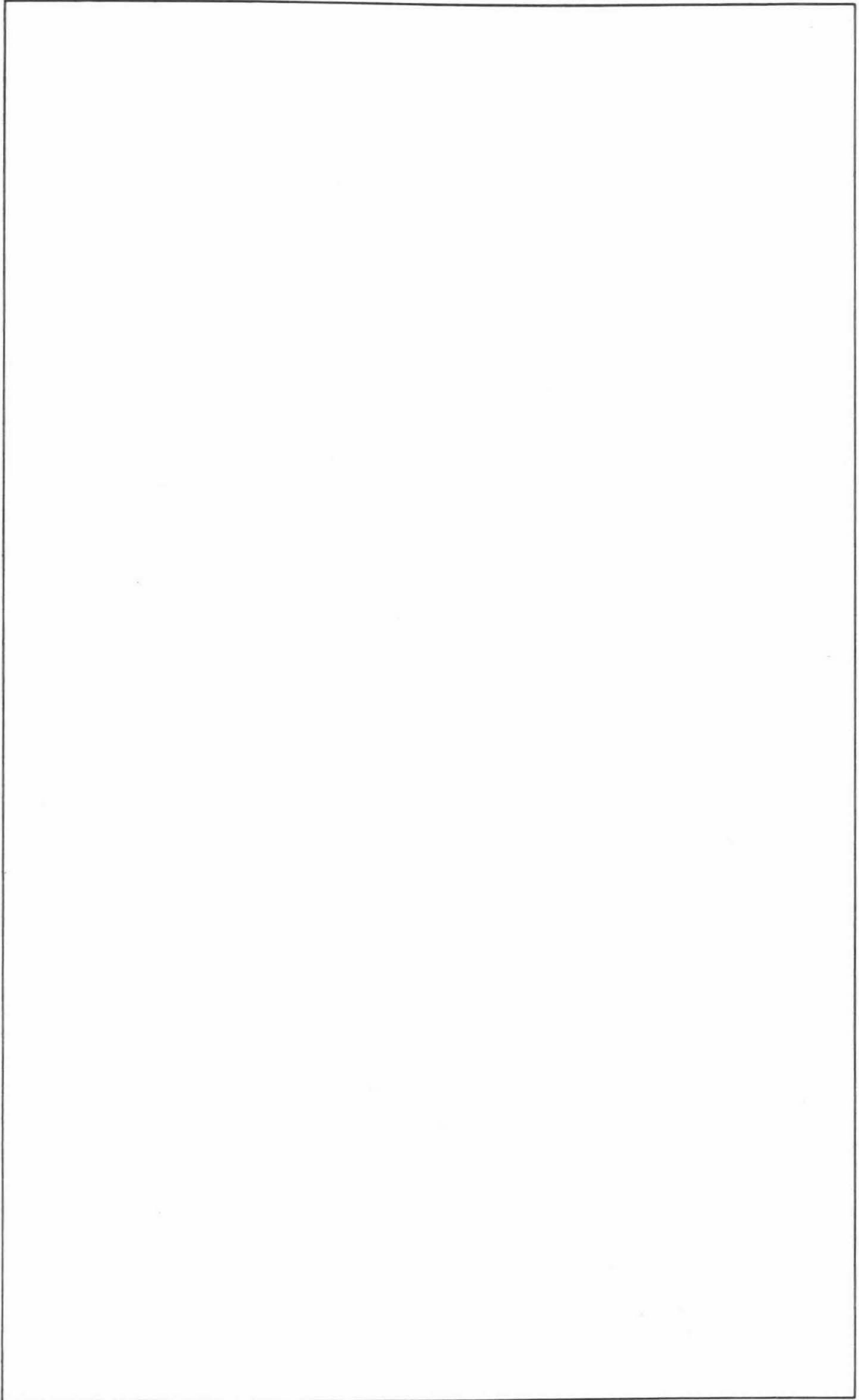
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0201.7 + 2557	medium compact	89	1.9	ED	4
0206.6 + 2306	open	141	4.5	D	3
0207.4 + 2700	medium compact	145	2.5	VD	2
0209.1 + 2317	medium compact	70	1.3	ED	14
0209.3 + 2125	medium compact	88	2.2	VD	13
0210.2 + 2255	medium compact	60	1.6	ED	12
0211.0 + 2550	compact	130	2.5	D	11
0213.3 + 2500	compact	125	3.2	VD	10
0216.3 + 2505	compact	64	2.7	VD	9
0219.3 + 2606	medium compact	156	2.6	D	8
0220.9 + 2510	medium compact	111	2.1	ED	6
0221.0 + 2537	medium compact	69	2.4	ED	7
0225.2 + 2313	medium compact	122	2.1	VD	5
0226.0 + 2600	open	1184	50.0	Near	1

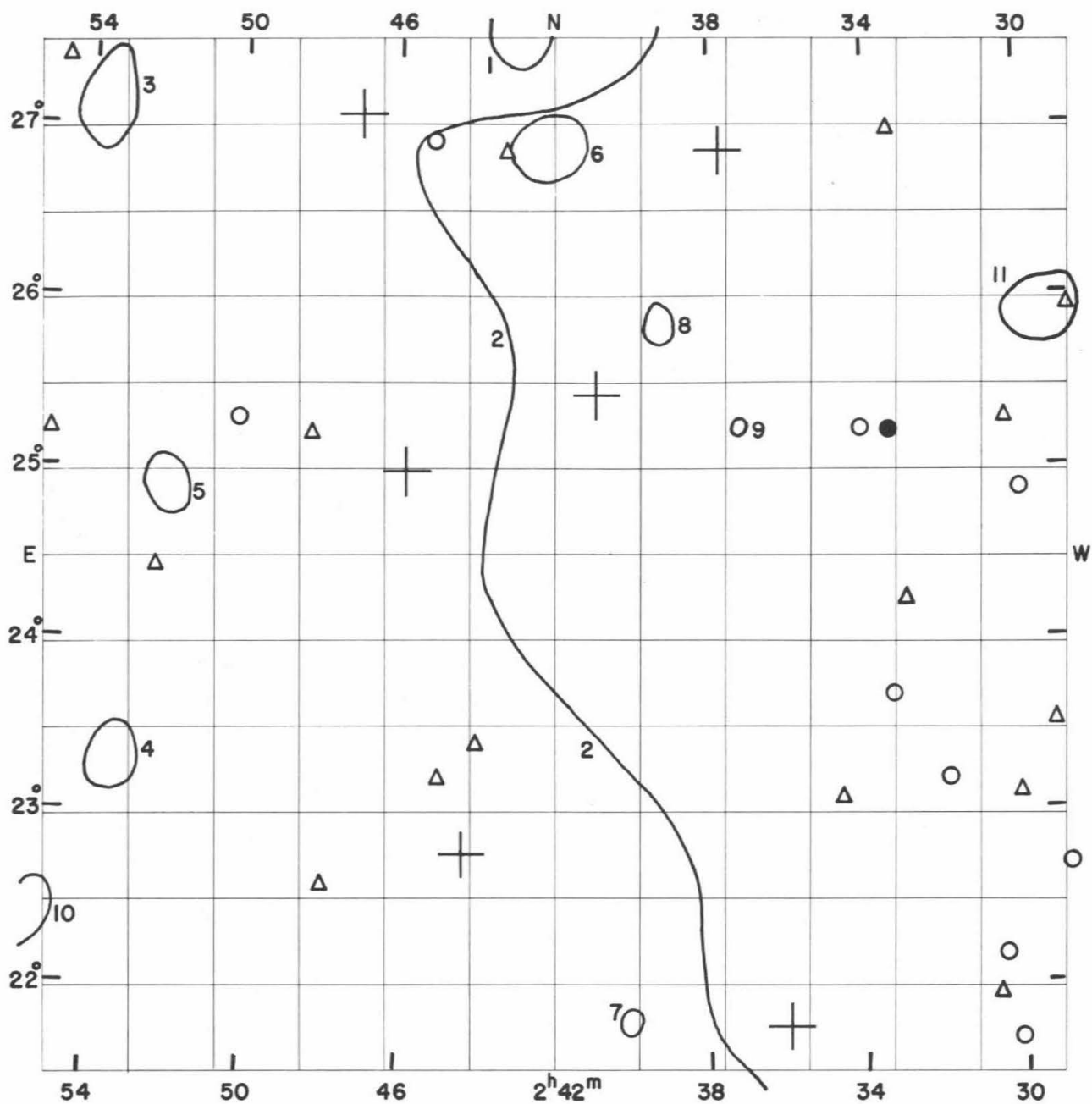
Average number of galaxies per cluster = 182.4

GALAXIES

Position a 1950 δ				NGC IC*	m_p	V_s km/sec	Remarks
h	m	o	i				
2	02.5	+	24 52		15.5		
2	02.9	+	24 00		15.4		
2	03.6	+	26 48		15.5		
2	06.1	+	25 48		15.4		
2	06.1	+	27 18		15.4		
2	06.4	+	25 20		14.5		
2	07.4	+	25 26		15.3		
2	08.3	+	25 35		15.5		
2	10.7	+	25 37		14.7		
2	11.4	+	23 24		15.7		
2	12.5	+	21 47		15.6		
2	12.9	+	24 59		14.9		
2	13.4	+	23 25		15.6		
2	13.7	+	26 06		15.5		
2	17.4	+	23 15		15.6		
2	18.2	+	23 22		14.7		
2	18.5	+	25 11		14.6		
2	20.0	+	25 05		15.7		
2	20.0	+	25 43		15.7		
2	20.2	+	25 12		15.7		compact
2	20.3	+	24 31		15.7		
2	20.7	+	25 15		15.7		
2	20.7	+	26 17	900	15.0		
2	20.7	+	27 05		15.6		
2	20.8	+	26 56		15.7		very diffuse
2	21.0	+	25 19		15.0		
2	21.0	+	27 16		15.5		
2	21.2	+	27 07	904	15.0		compact
2	21.8	+	25 20		14.7		
2	21.9	+	25 18		15.7		
2	22.1	+	25 49		15.7		double system, connected
2	22.1	+	27 18		15.6		
2	22.2	+	22 00		14.9		
2	22.3	+	23 37		15.6		

Position			NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ				
h	m	o				
2	22.4	+ 24 02		15.0		
2	22.5	+ 23 36		15.5		
2	22.7	+ 26 31		14.8		double system, connected
2	22.7	+ 27 05		15.6		
2	22.8	+ 22 47		15.6		
2	22.8	+ 24 45		15.5		
2	22.8	+ 27 00	915	15.0		
2	22.9	+ 24 33		15.7		
2	22.9	+ 27 01	916	14.9		
2	22.9	+ 27 11		15.6		
2	23.0	+ 24 38		15.6		
2	23.3	+ 25 50		15.5		
2	23.3	+ 25 53		15.1		
2	23.3	+ 27 23		15.3		
2	23.4	+ 26 59	919	15.5		
2	23.5	+ 27 26		15.0		
2	23.6	+ 21 55		15.7		diffuse
2	23.7	+ 25 35		15.6		
2	24.0	+ 24 48		15.1		
2	24.5	+ 22 52		15.7		
2	24.6	+ 24 02		15.5		
2	24.6	+ 25 26		14.7		
2	24.8	+ 21 56		15.7		
2	24.8	+ 26 00		14.9		
2	24.8	+ 26 22		14.6		
2	24.8	+ 27 00	928	14.7		
2	25.1	+ 21 35		15.5		
2	25.3	+ 23 42		15.2		
2	25.4	+ 23 00		15.0		
2	25.4	+ 26 05		14.9		
2	25.8	+ 23 35		15.7		
2	26.0	+ 25 07		15.4		
2	26.3	+ 22 51		15.0		compact
2	27.0	+ 22 52		15.7		compact
2	27.0	+ 25 02		15.3		
2	27.4	+ 22 55		15.5		compact
2	27.6	+ 22 44	1807*	15.7		compact
2	27.7	+ 26 56		15.7		
2	27.9	+ 25 58		15.7		
2	28.0	+ 25 11		15.5		





FIELD No. 484

$2^{\text{h}}42^{\text{m}} + 24^{\circ}30'$

Survey Plate No. 222

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	°	'	"	
3167	2	35	58.3	+	21	44 47	5.36
3215	2	37	45.4	+	26	50 51	5.38
3282	2	40	56.8	+	25	25 36	6.37
3347	2	44	23.2	+	22	45 08	7.27
3373	2	45	51.1	+	24	58 50	5.87
3391	2	47	02.1	+	27	03 21	3.68

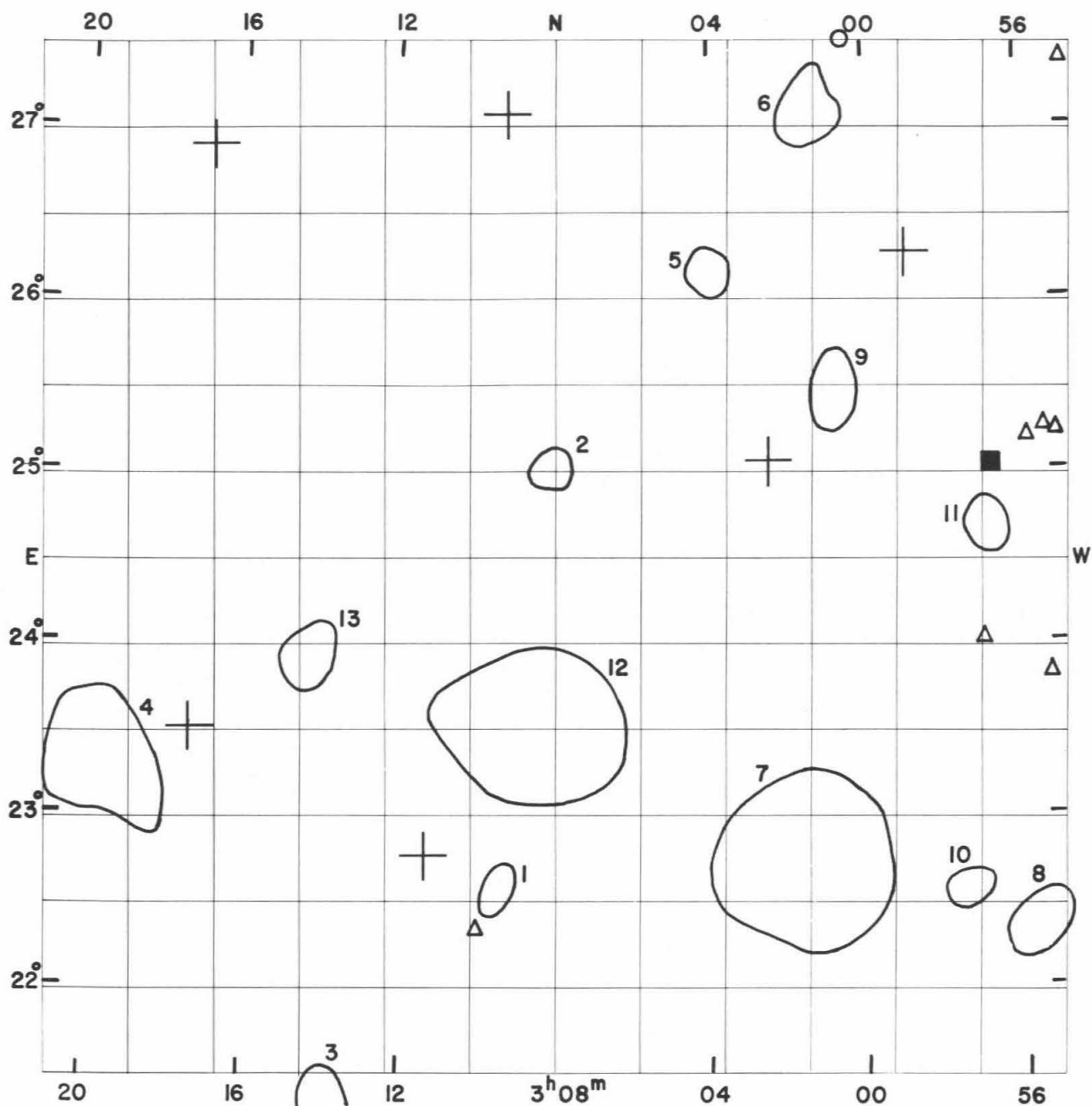
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0226.0 + 2600	open	1184	50.0	Near	2
0229.4 + 2556	medium compact	101	2.2	VD	11
0237.2 + 2514	compact	45	0.5	ED	9
0239.3 + 2550	compact	69	1.0	ED	8
0239.9 + 2147	compact	59	0.7	ED	7
0242.2 + 2652	compact	95	2.2	ED	6
0242.9 + 2734	compact	152	2.1	ED	1
0252.0 + 2452	open	56	1.5	ED	5
0253.3 + 2317	open	70	1.8	ED	4
0253.8 + 2706	open	94	2.2	ED	3
0255.6 + 2222	compact	82	1.9	ED	10

Average number of galaxies per cluster = 182.5

GALAXIES

Position			NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ				
h	m	o				
2	28.7	+ 25 58	1809*	15.6		
2	28.8	+ 22 42		15.0		
2	29.2	+ 23 32		15.4		
2	30.0	+ 24 53		14.9		
2	30.1	+ 23 07		15.6		
2	30.2	+ 21 40		14.8		compact
2	30.4	+ 25 17		15.7		
2	30.5	+ 22 10	984	14.6		
2	30.7	+ 21 56		15.7		
2	31.9	+ 23 12		14.5		
2	33.0	+ 24 15		15.5		
2	33.3	+ 23 41		14.8		
2	33.3	+ 26 59		15.7		compact
2	33.4	+ 25 12		14.0		
2	34.1	+ 25 14	1861*	14.8		compact
2	34.6	+ 23 05		15.5		
2	43.3	+ 26 50		15.5		
2	44.0	+ 23 24		15.7		
2	45.0	+ 23 12		15.6		
2	45.1	+ 26 54		14.7		
2	47.9	+ 22 35		15.5		
2	48.3	+ 25 12		15.7		
2	50.1	+ 25 17		14.7		
2	52.2	+ 24 26		15.6		
2	54.8	+ 27 23		15.7		
2	55.1	+ 25 14		15.6		



FIELD No. 485

$3^{\text{h}}08^{\text{m}} + 24^{\circ}30'$

Survey Plate No. 1276

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	o	'	"	
3629	2	58	57.0	+	26	15 57	5.91
3697	3	02	30.4	+	25	03 43	5.36
3821	3	09	15.1	+	27	04 12	5.65
3859	3	11	22.2	+	22	46 06	6.90
3970	3	16	56.3	+	26	53 30	5.94
3985	3	17	25.1	+	23	30 36	7.35

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0255.6 + 2222	compact	82	1.9	ED	8
0256.9 + 2440	medium compact	62	1.5	ED	11
0257.4 + 2235	compact	51	1.3	ED	10
0300.8 + 2528	medium compact	68	1.9	ED	9
0301.4 + 2705	open	94	2.1	VD	6
0301.6 + 2244	medium compact	157	5.6	D	7
0304.1 + 2609	medium compact	57	1.4	ED	5
0308.1 + 2501	compact	67	1.3	ED	2
0308.5 + 2330	medium compact	120	5.3	D	12
0309.4 + 2235	medium compact	66	1.3	ED	1
0313.8 + 2118	compact	68	1.9	VD	3
0314.3 + 2355	medium compact	102	2.0	ED	13
0319.6 + 2320	medium compact	148	4.0	D	4

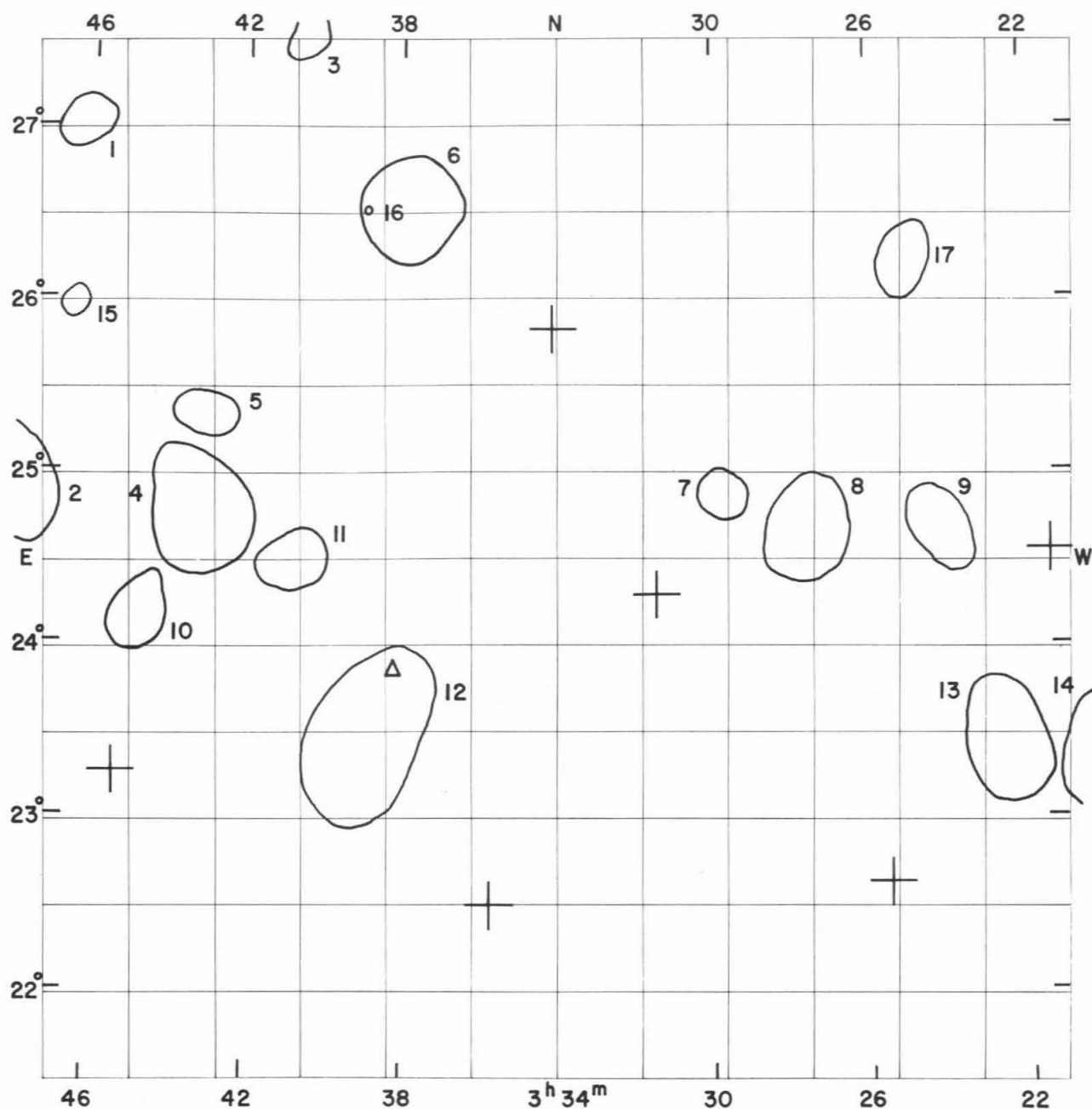
Average number of galaxies per cluster = 87.8

GALAXIES

Position α 1950 δ			NGC IC*	m _p	V _s km/sec	Remarks
h	m	o				
2	54.8	+ 27 23		15.7		
2	55.1	+ 25 14		15.6		
2	55.2	+ 23 50		15.5		
2	55.4	+ 25 15		15.7		
2	55.8	+ 25 12		15.7		
2	56.8	+ 25 03	1156	12.0	+ 405	m _H = 12.9 I
2	57.0	+ 24 02		15.5		diffuse
3	00.5	+ 27 30		15.0		compact
3	10.0	+ 22 20		15.6		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
1156	-	-	12.22	Irr.	12.2	Irr.	11.85	Ir. I



FIELD No. 486

$3^{\text{h}}34^{\text{m}} + 24^{\circ}30'$

Survey Plate No. 441

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	o	i	"	
4051	3	21	21.0	+	24	32 54	5.66
4126	3	25	30.9	+	22	38 00	6.11
4257	3	31	28.6	+	24	17 54	5.92
4310	3	34	10.2	+	25	49 51	8.1
4338	3	35	44.4	+	22	29 52	6.57
4564	3	45	22.9	+	23	16 09	5.51

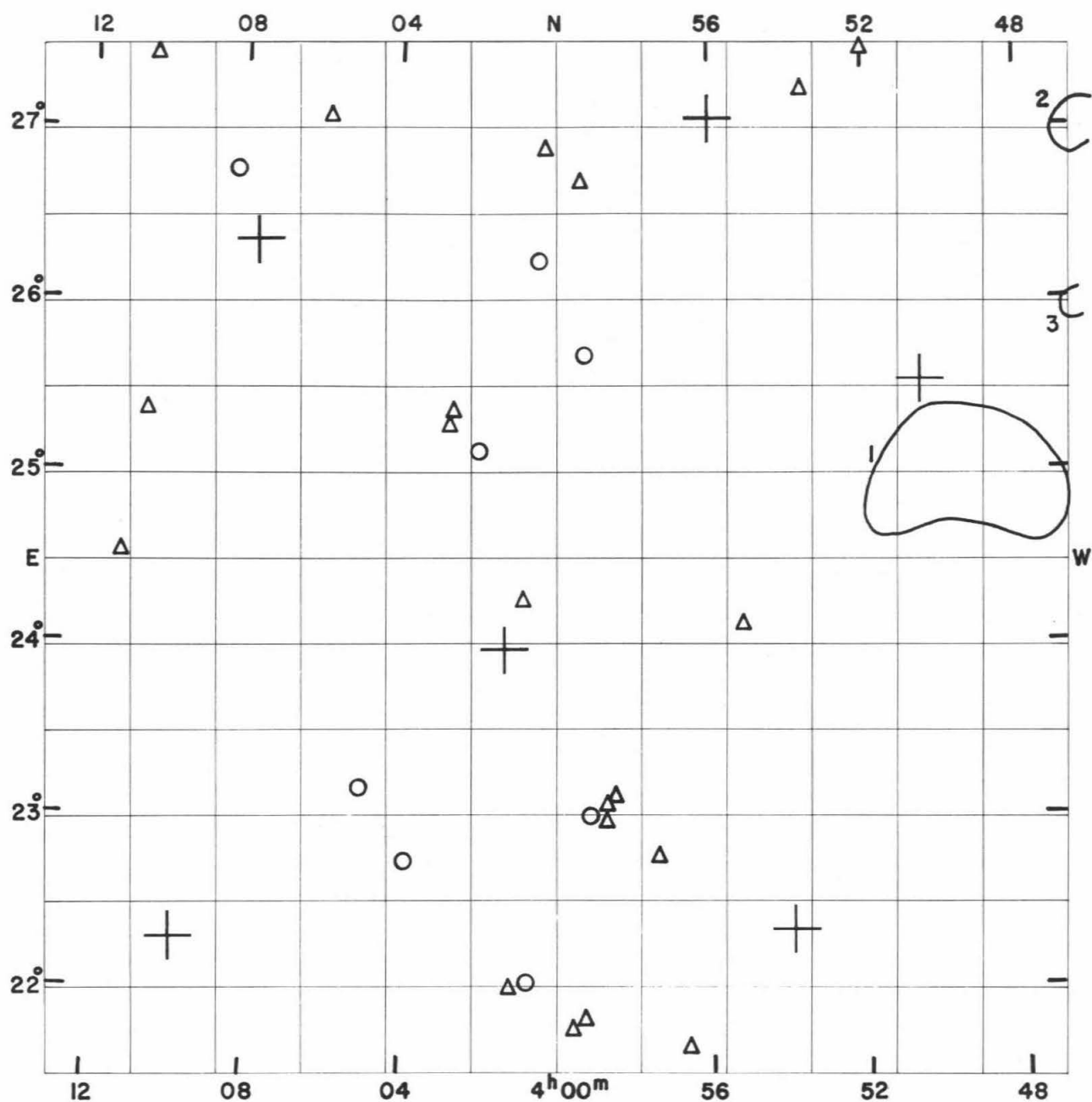
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0319.6 + 2320	medium compact	148	4.0	D	14
0322.4 + 2325	open	60	3.2	VD	13
0324.1 + 2441	medium compact	74	2.3	ED	9
0325.0 + 2613	open	81	2.0	ED	17
0327.5 + 2440	medium compact	70	3.0	VD	8
0329.7 + 2452	compact	45	1.5	VD	7
0337.7 + 2631	medium compact	86	3.3	VD	6
0338.8 + 2327	open	94	4.5	D	12
0338.9 + 2631	compact	40	0.3	ED	16
0340.4 + 2732	compact	61	1.3	ED	3
0340.7 + 2429	medium compact	54	2.1	ED	11
0343.0 + 2520	compact	57	1.6	ED	5
0343.1 + 2445	open	64	3.6	VD	4
0344.7 + 2409	medium compact	72	2.1	VD	10
0346.3 + 2702	compact	57	1.6	VD	1
0346.4 + 2558	compact	49	1.0	ED	15
0349.4 + 2458	medium compact	80	4.9	D	2

Average number of galaxies per cluster = 70.1

GALAXIES

Position			NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ				
h	m	o				
3	38.2	+ 23 51		15.7		



FIELD No. 487

4^h00^m + 24°30'

Survey Plate No. 31

GC STARS

Nos.	R.A.			Decl.			m _p
	h	m	s	°	'	"	
4680	3	50	33.5	+	25	32 09	7.16
4744	3	53	54.5	+	22	20 08	5.76
4780	3	56	02.2	+	27	03 21	7.38
4886	4	01	22.0	+	23	58 12	5.67
5020	4	07	46.9	+	26	21 08	5.55
5066	4	09	53.1	+	22	17 12	6.16

CLUSTERS OF GALAXIES

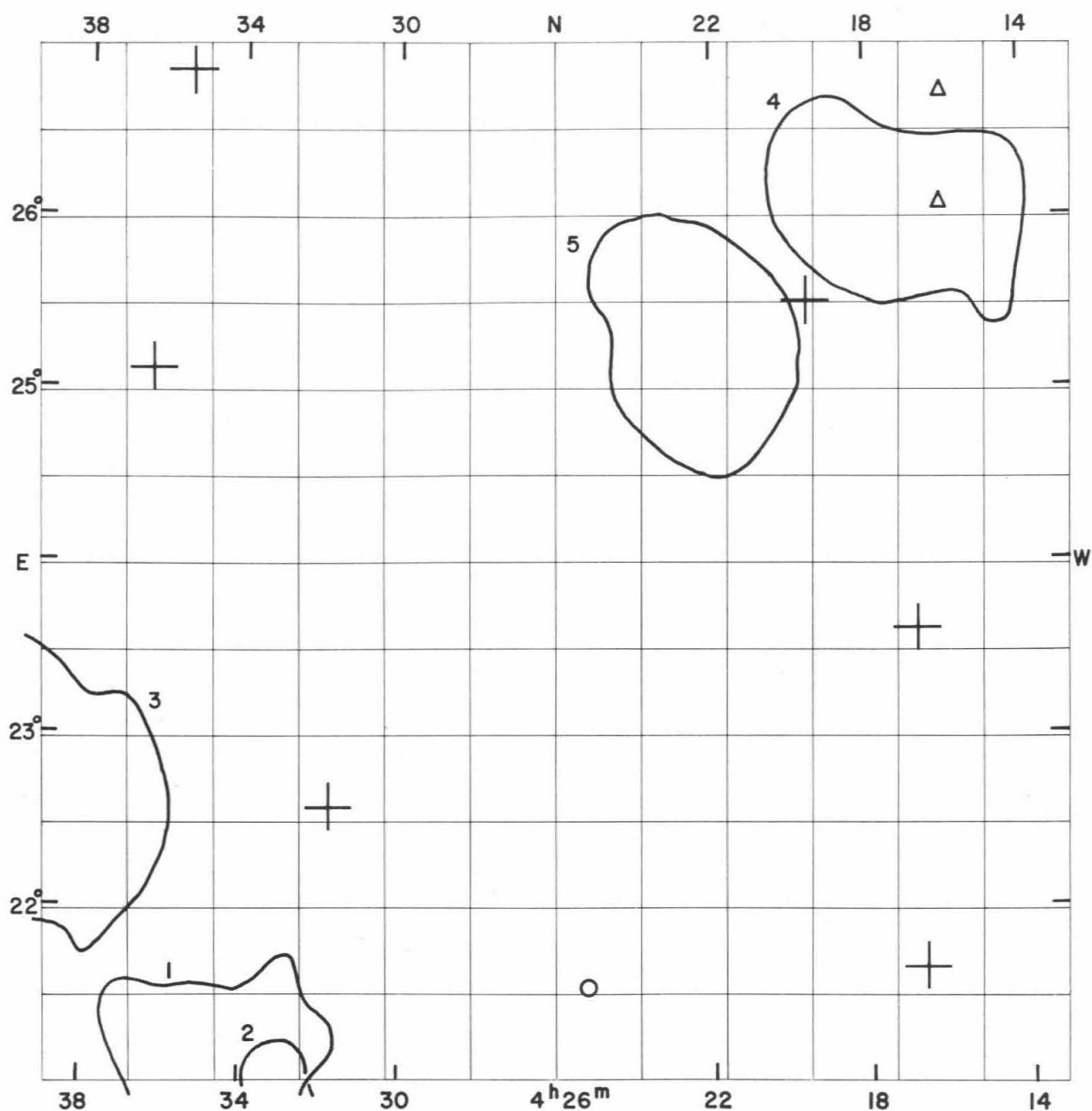
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0346.3 + 2702	compact	57	1.6	VD	2
0346.4 + 2558	compact	49	1.0	ED	3
0349.4 + 2458	medium compact	80	4.9	D	1

Average number of galaxies per cluster = 62.0

GALAXIES

Position			NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ				
h	m	o				
3	52.1	+ 27 27		15.4		*)
3	53.6	+ 27 13		15.6		
3	55.2	+ 24 07		15.6		
3	56.6	+ 21 40		15.3		star superposed
3	57.3	+ 22 45		15.7		very diffuse
3	58.4	+ 23 07		15.4		
3	58.7	+ 22 58		15.2		
3	58.7	+ 23 04		15.5		
3	59.1	+ 23 00	1497	14.5		
3	59.2	+ 21 49		15.7		compact
3	59.3	+ 25 40		14.8		
3	59.4	+ 26 41		15.6		
3	59.6	+ 21 45		15.5		
4	00.3	+ 26 52		15.7		
4	00.5	+ 26 13		14.9		
4	00.8	+ 22 01	357*	14.3		
4	00.9	+ 24 15		15.6		
4	01.2	+ 22 00		15.7		double system
4	02.0	+ 25 07		14.6		
4	02.7	+ 25 21		15.3		
4	02.8	+ 25 16	1508	15.2		
4	03.9	+ 22 44		15.0		
4	05.0	+ 23 10		14.9		
4	05.9	+ 27 04		15.5		very diffuse
4	08.3	+ 26 45		14.6		
4	10.5	+ 27 25		15.2		*)
4	10.6	+ 25 21		15.5		
4	11.2	+ 24 32		15.5		

*) These two galaxies are actually outside of Survey Plate #31, but can be found on Plate #1468 instead.



FIELD No. 488

$4^{\text{h}}26^{\text{m}} + 24^{\circ}00'$

Survey Plate No. 228

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	°	'	"	
5216	4	16	38.9	+	21	39 16	5.32
5218	4	16	45.6	+	23	37 08	7.46
5292	4	19	32.1	+	25	30 47	5.38
5575	4	31	45.6	+	22	35 24	6.81
5648	4	35	24.0	+	26	50 32	6.49
5663	4	36	20.0	+	25	07 15	6.27

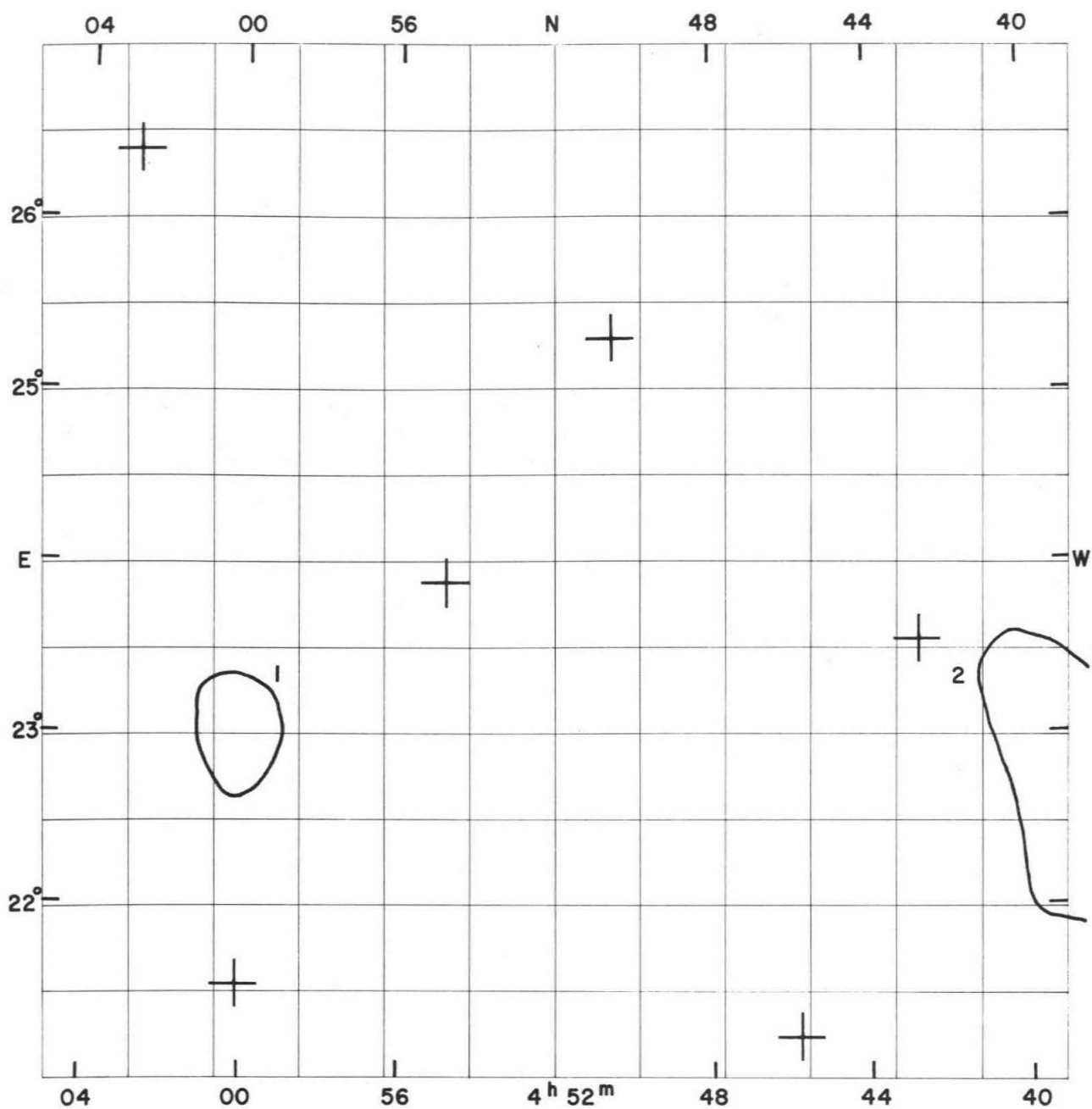
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0416.9 + 2601	open	130	7.2	MD	4
0422.3 + 2515	open	95	7.1	MD	5
0432.9 + 2051	medium compact	92	2.8	VD	2
0434.5 + 2112	medium compact	96	5.8	Near	1
0438.4 + 2238	open	94	7.2	MD	3

Average number of galaxies per cluster = 101.4

GALAXIES

Position			NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ				
h	m	o				
4	16.0	+ 26 43	1539	15.7		compact
4	16.1	+ 26 04		15.7		very diffuse
4	25.2	+ 21 33		14.9		



FIELD No. 489

$4^{\text{h}}52^{\text{m}} + 24^{\circ}00'$

Survey Plate No. 1461

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
5791	4 42 41.1	+ 23 32 16	6.17
5846	4 45 45.4	+ 21 13 44	6.91
5956	4 50 32.4	+ 25 17 07	7.21
6044	4 54 46.5	+ 23 52 21	5.99
6158	5 00 06.3	+ 21 31 13	4.70
6220	5 02 47.5	+ 26 21 47	6.56

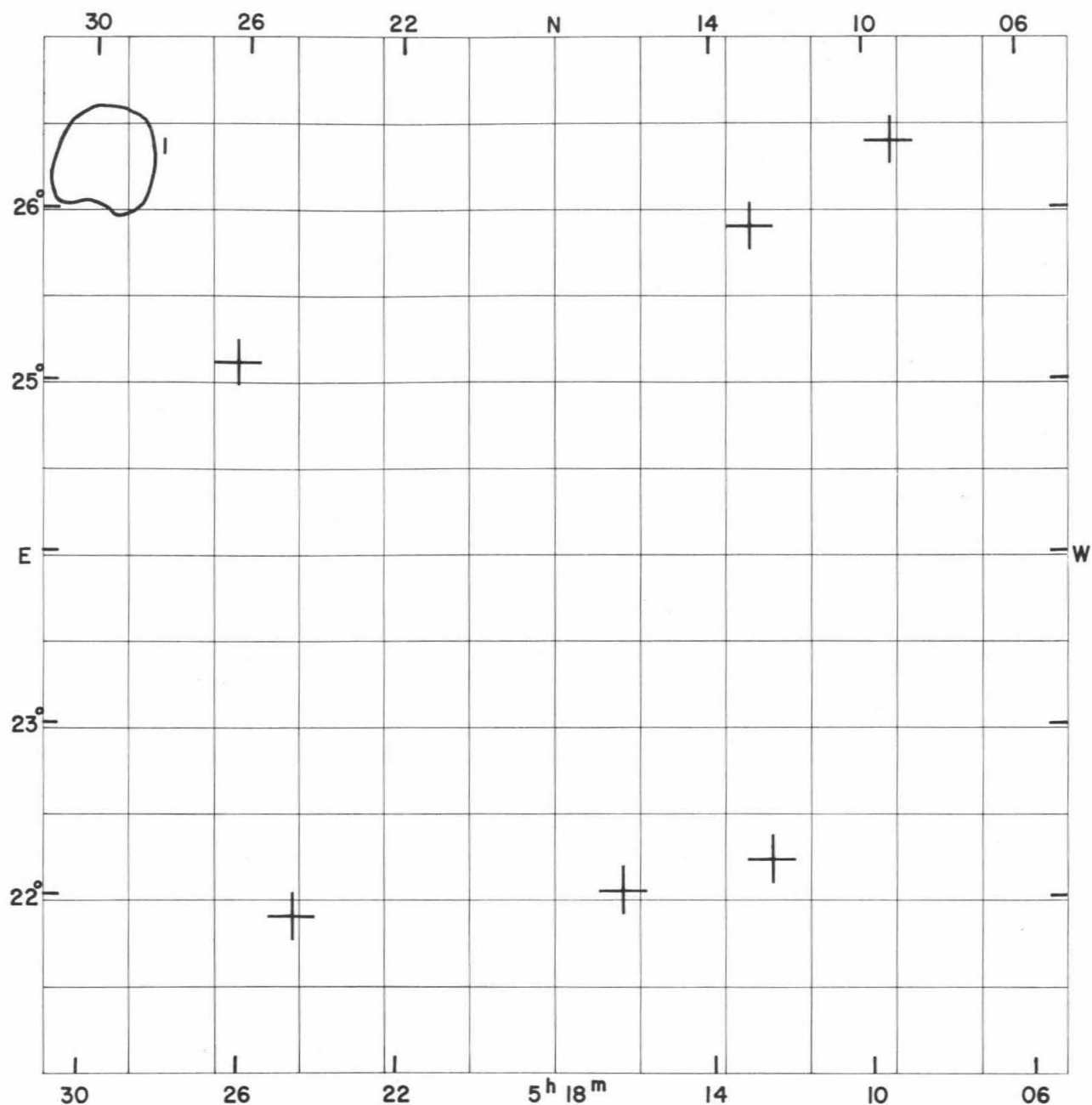
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0438.4 + 2238	open	94	7.2	MD	2
0500.0 + 2258	compact	95	3.3	D	1

Average number of galaxies per cluster = 94.5

GALAXIES

No galaxies in this field



FIELD No. 490
 $5^{\text{h}}18^{\text{m}} + 24^{\circ}00'$
 Survey Plate No. 454

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	°	'	"	
6364	5	09	15.6	+	26	23 50	6.84
6413	5	12	27.2	+	22	13 46	6.16
6426	5	12	54.8	+	25	54 10	7.90
6506	5	16	16.2	+	22	02 48	5.14
6723	5	24	37.8	+	21	53 46	4.83
6764	5	26	11.7	+	25	06 43	5.86

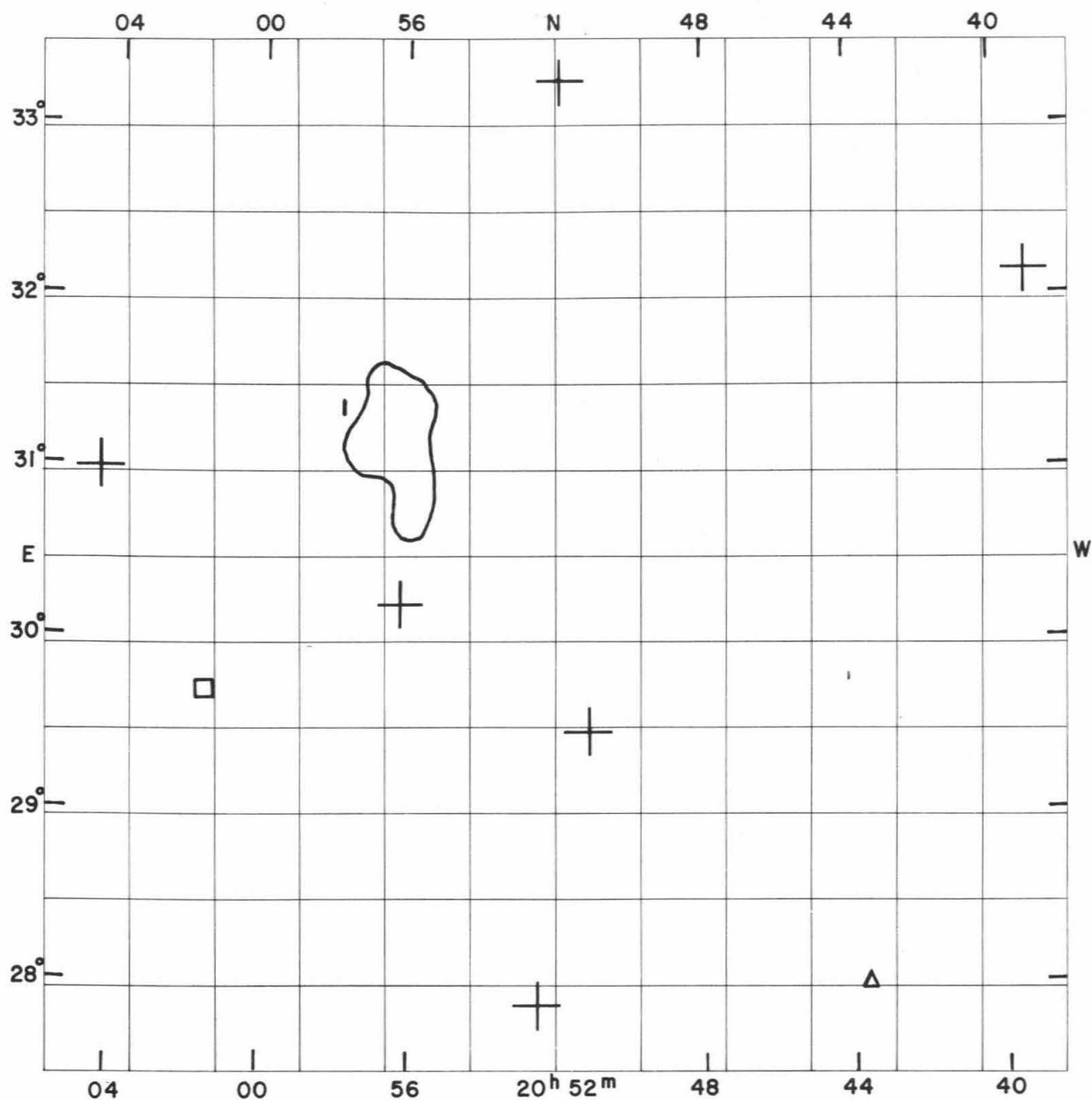
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0529.7 + 2615	medium compact	58	3.3	D	1

Average number of galaxies per cluster = 58.0

GALAXIES

No galaxies in this field



FIELD No. 491
 $20^{\text{h}}52^{\text{m}} + 30^{\circ}30'$
 Survey Plate No. 757

GC STARS

Nos.	R.A.			Decl.	m_p
	h	m	s		
28827	20	39	01.0	+ 32 07 42	5.9
29136	20	51	01.3	+ 29 27 37	6.40
29159	20	51	52.2	+ 33 14 48	5.68
29178	20	52	25.6	+ 27 51 59	5.24
29270	20	56	09.5	+ 30 12 04	6.64
29502	21	04	24.2	+ 30 59 00	Var.

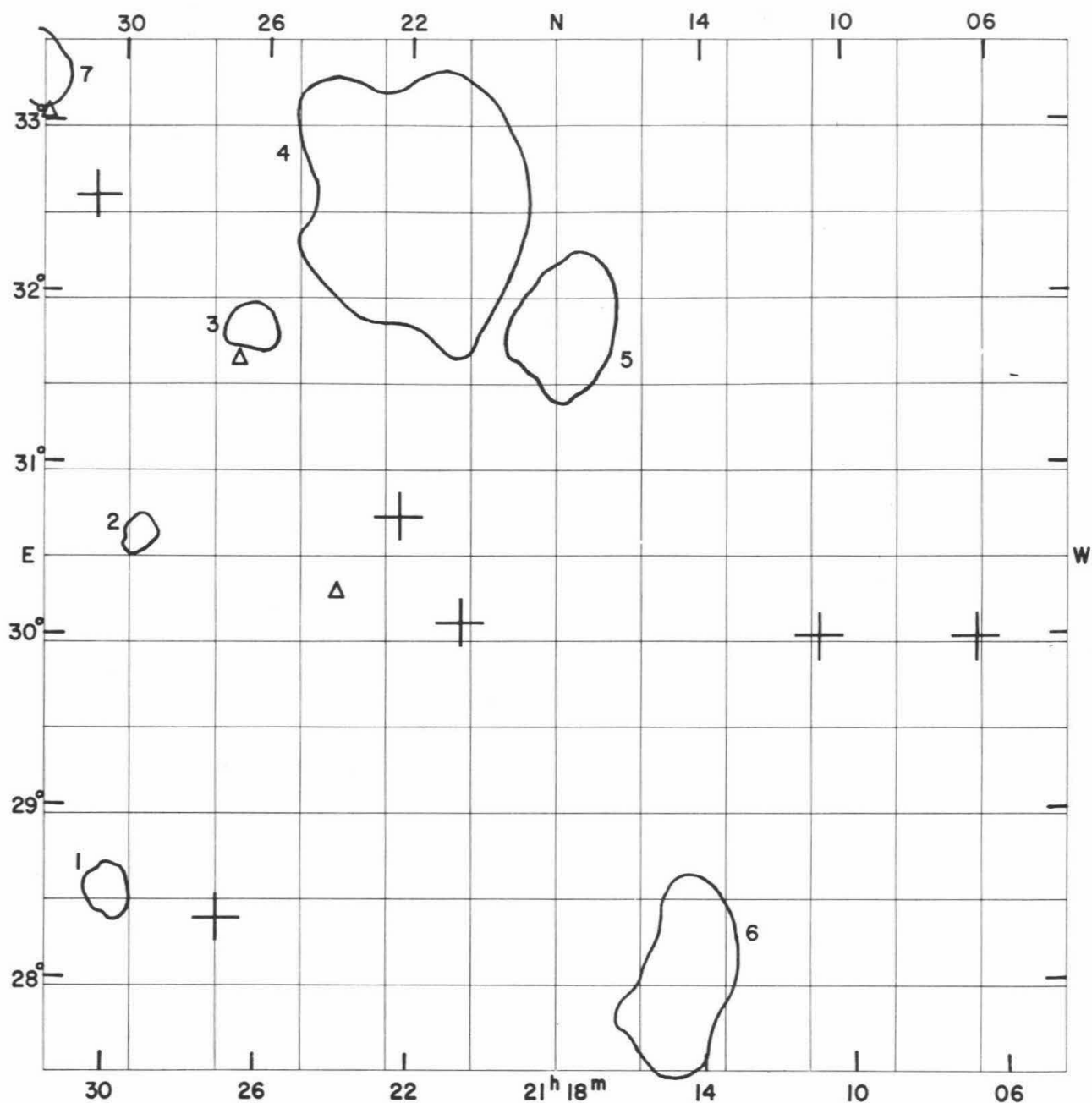
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
2056.3 + 3107	medium compact	65	3.5	MD	1

Average number of galaxies per cluster = 65.0

GALAXIES

Position			NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ				
h	m	o				
20	43.6	+ 28 00		15.5		
21	01.4	+ 29 42	7013	12.9	+ 570	



FIELD No. 492

$21^{\text{h}}18^{\text{m}} + 30^{\circ}30'$

Survey Plate No. 803

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	o	i	"	
29562	21	06	31.5	+	30	00 10	5.7
29661	21	10	48.4	+	30	01 15	3.40
29933	21	20	32.8	+	30	05 43	6.28
29975	21	22	14.0	+	30	43 14	6.72
30091	21	27	04.1	+	28	21 56	6.83
30174	21	30	42.7	+	32	33 17	7.17

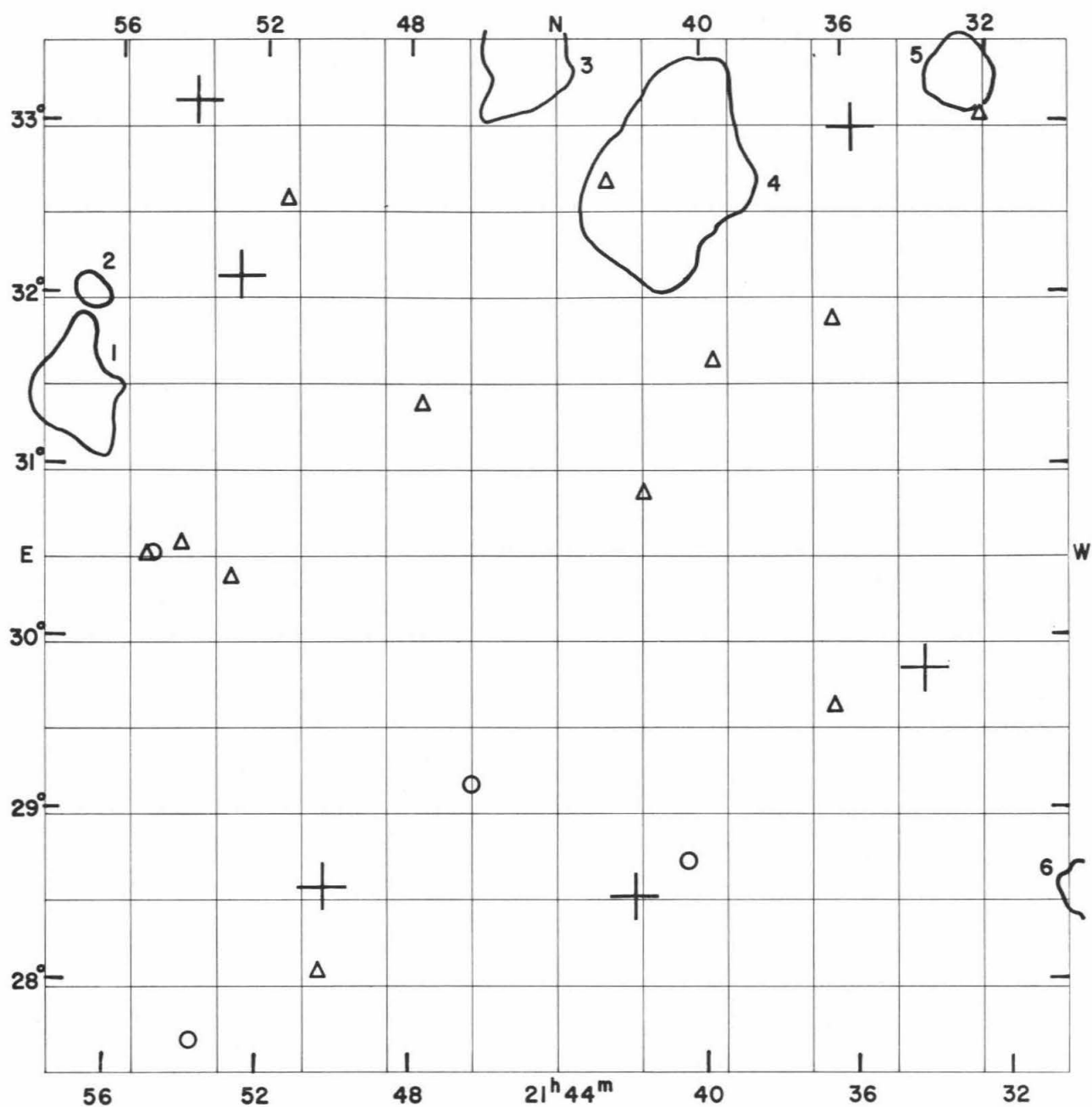
CLUSTERS OF GALAXIES

Cluster	Character	Popu- lation	Diameter in cm	Distance	Number on chart
2114.6 + 2801	medium compact	79	4.5	MD	6
2117.7 + 3150	open	55	3.8	D	5
2121.9 + 3233	medium compact	87	7.9	MD	4
2126.3 + 3149	compact	61	1.6	VD	3
2129.3 + 3036	compact	47	1.2	VD	2
2129.9 + 2832	compact	57	1.6	VD	1
2132.6 + 3317	compact	51	2.1	VD	7

Average number of galaxies per cluster = 62.4

GALAXIES

Position				NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ					
h	m	o	i				
21	23.9	+ 30	16		15.5		
21	26.7	+ 31	36		15.6		
21	32.2	+ 33	02		15.7		



FIELD No. 493
 $21^{\text{h}}44^{\text{m}} + 30^{\circ}30'$
 Survey Plate No. 1212

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	°	'	"	
30246	21	34	03.1	+	29	49 48	6.47
30283	21	35	46.9	+	32	58 26	7.50
30437	21	41	54.2	+	28	30 58	6.08
30625	21	50	15.8	+	28	33 31	5.62
30677	21	52	42.6	+	32	06 06	7.10
30707	21	54	01.1	+	33	07 42	6.96

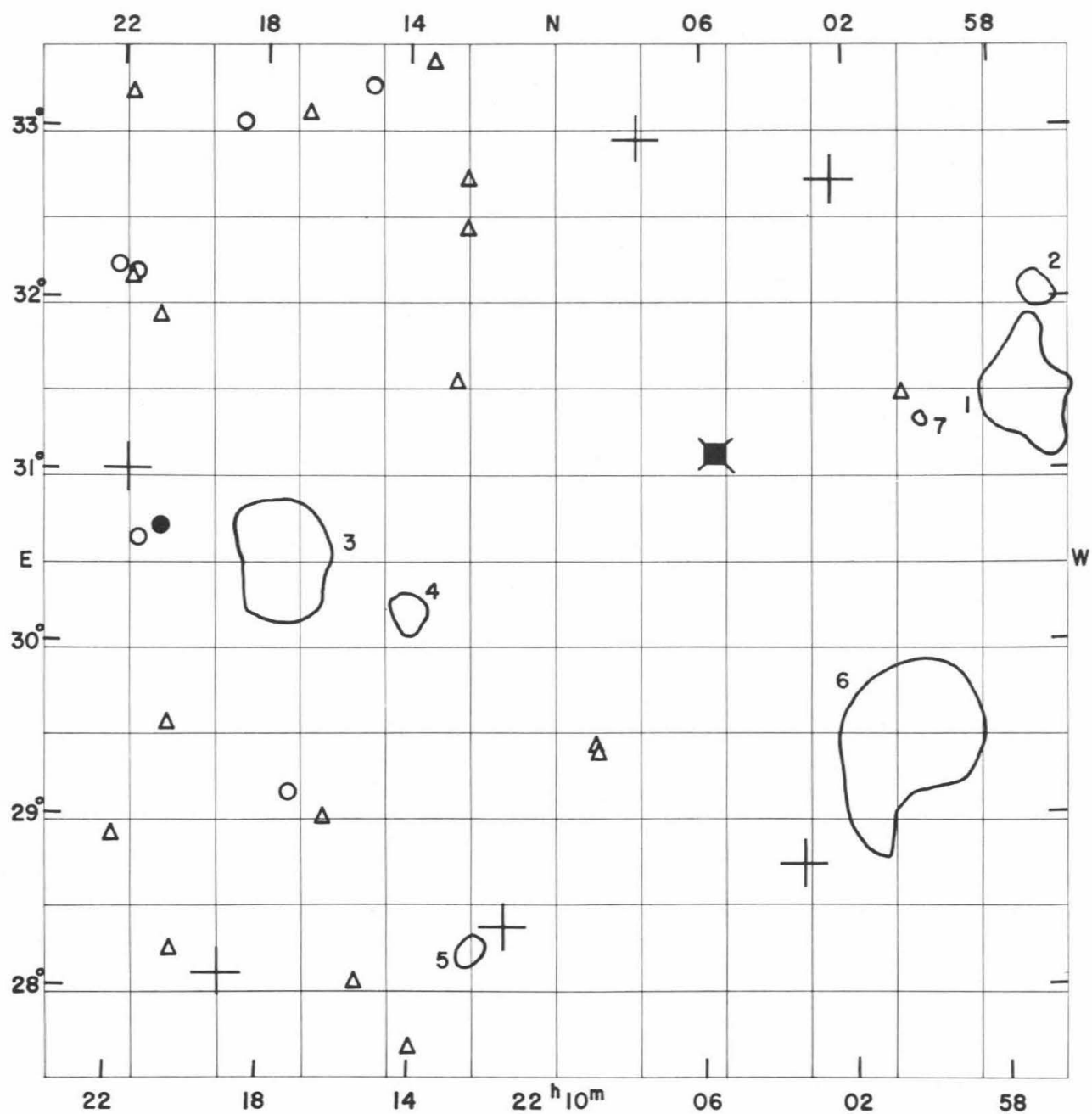
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
2129.9 + 2832	compact	57	1.6	VD	6
2132.6 + 3317	compact	51	2.1	VD	5
2140.8 + 3240	open	90	5.8	MD	4
2144.7 + 3333	medium compact	134	4.0	MD	3
2156.7 + 3202	compact	43	1.1	VD	2
2157.0 + 3126	medium compact	83	3.0	MD	1

Average number of galaxies per cluster = 76.3

GALAXIES

Position α 1950 δ			NGC IC*	m _p	V _s km/sec	Remarks
h	m	o				
21	32.2	+ 33 02		15.7		
21	36.4	+ 31 52		15.6		compact
21	36.5	+ 29 37		15.5		
21	39.7	+ 31 38		15.7		
21	40.4	+ 28 43	7116	14.2		
21	41.6	+ 30 51		15.7		
21	42.6	+ 32 40		15.7		compact
21	46.2	+ 29 10		15.0		
21	47.7	+ 31 23		15.7		
21	50.3	+ 28 04		15.4		
21	51.4	+ 32 33		15.7		
21	52.8	+ 30 21		15.4		
21	53.7	+ 27 40		15.0		
21	54.2	+ 30 33		15.7		
21	54.9	+ 30 30		15.0		compact
21	55.1	+ 30 29		15.7		



FIELD No. 494

$22^{\text{h}}10^{\text{m}} + 30^{\circ}30'$

Survey Plate No. 383

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	o	i	"	
30879	22	02	21.6	+	32	41 56	6.39
30899	22	03	18.5	+	28	43 13	5.58
31016	22	07	45.8	+	32	55 56	4.38
31094	22	11	21.0	+	28	21 36	6.01
31253	22	19	00.6	+	28	04 41	4.88
31312	22	21	39.2	+	31	00 29	7.46

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
2156.7 + 3202	compact	43	1.1	VD	2
2157.0 + 3126	medium compact	83	3.0	MD	1
2200.0 + 3117	compact	25	0.3	ED	7
2200.6 + 2925	medium compact	81	4.8	MD	6
2212.3 + 2813	medium compact	35	0.9	VD	5
2213.9 + 3011	compact	61	1.3	VD	4
2217.4 + 3030	open	60	3.5	D	3

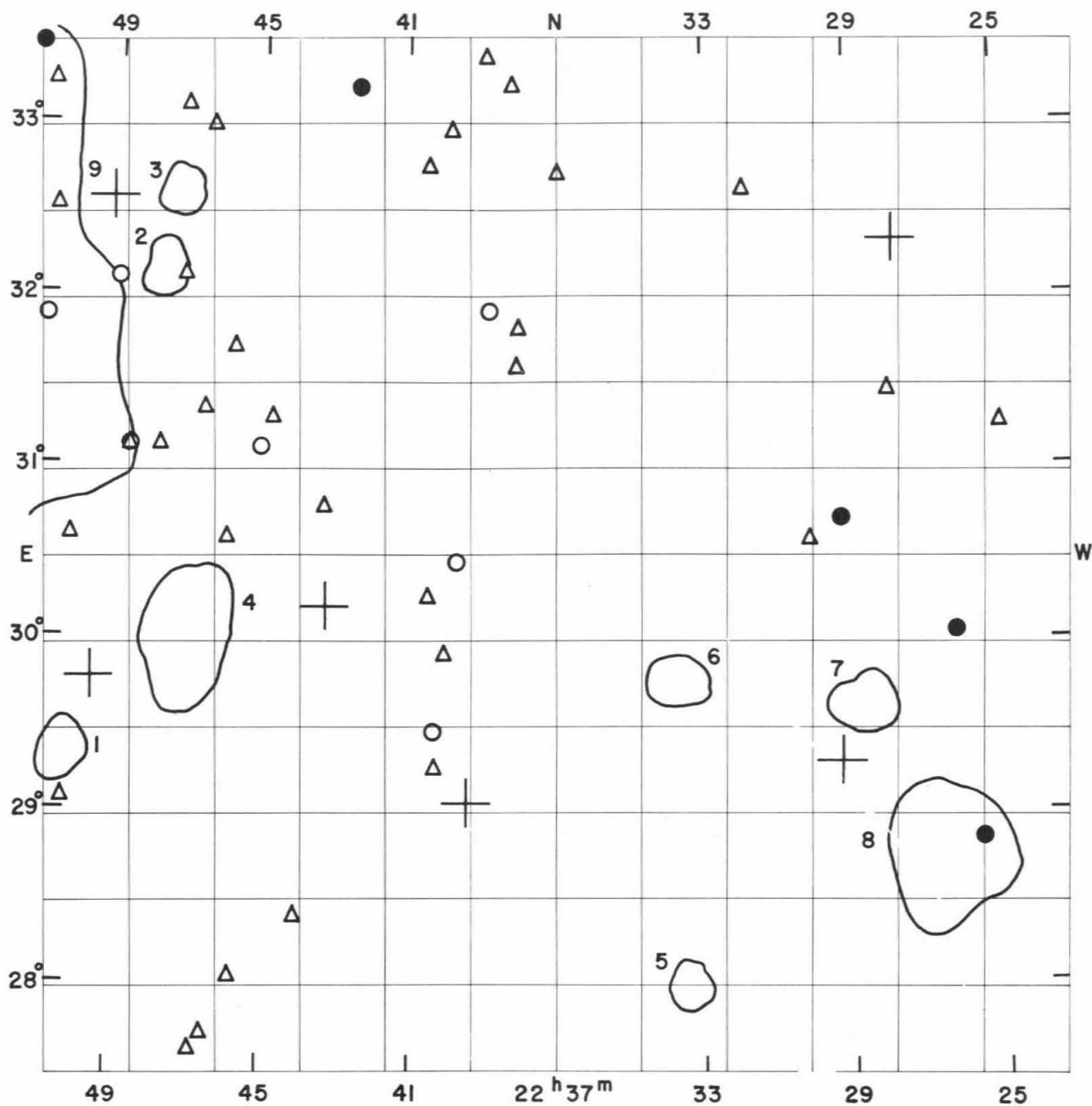
Average number of galaxies per cluster = 55.4

GALAXIES

Position			NGC IC*	m_p	V_s km/sec	Remarks
α h m	1950	δ o ' "				
22 00.5	+ 31 27			15.7		
22 05.6	+ 31 07		7217	11.0	+ 911	$m_H = 11.6$ S
22 08.8	+ 29 22			15.7		
22 08.8	+ 29 24			15.7		compact
22 12.4	+ 32 25			15.7		
22 12.4	+ 32 43			15.6		
22 12.7	+ 31 31			15.5		
22 13.3	+ 33 23			15.5		
22 13.9	+ 27 40			15.7		
22 15.0	+ 33 16			14.7		
22 15.4	+ 28 02			15.7		diffuse
22 16.2	+ 29 00			15.4		diffuse
22 16.8	+ 33 05			15.6		
22 17.2	+ 29 08		7253	14.4		double system
22 18.6	+ 33 03			15.0		
22 20.3	+ 28 13			15.6		
22 20.4	+ 29 31			15.2		
22 20.8	+ 30 40			14.0		double system, compact member
22 20.8	+ 31 54			15.6		compact
22 21.3	+ 30 36			14.9		
22 21.4	+ 32 08		7270	15.0		
22 21.6	+ 32 06		7271	15.7		
22 21.7	+ 33 11			15.1		
22 21.8	+ 28 52			15.7		
22 21.9	+ 32 11		7275	15.0		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
7217	-	-	11.09	Sb	11.0	Sb	11.00	Sb-



FIELD No. 495
 $22^{\text{h}}37^{\text{m}} + 30^{\circ}30'$
 Survey Plate No. 1174

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	°	'	"	
31430	22	27	44.4	+	32	18 58	5.51
31473	22	29	15.0	+	29	17 09	6.32
31674	22	39	24.3	+	29	02 46	4.85
31759	22	43	14.3	+	30	11 02	6.52
31879	22	49	13.0	+	32	33 00	7.11
31888	22	49	33.9	+	29	45 47	9.4

CLUSTERS OF GALAXIES

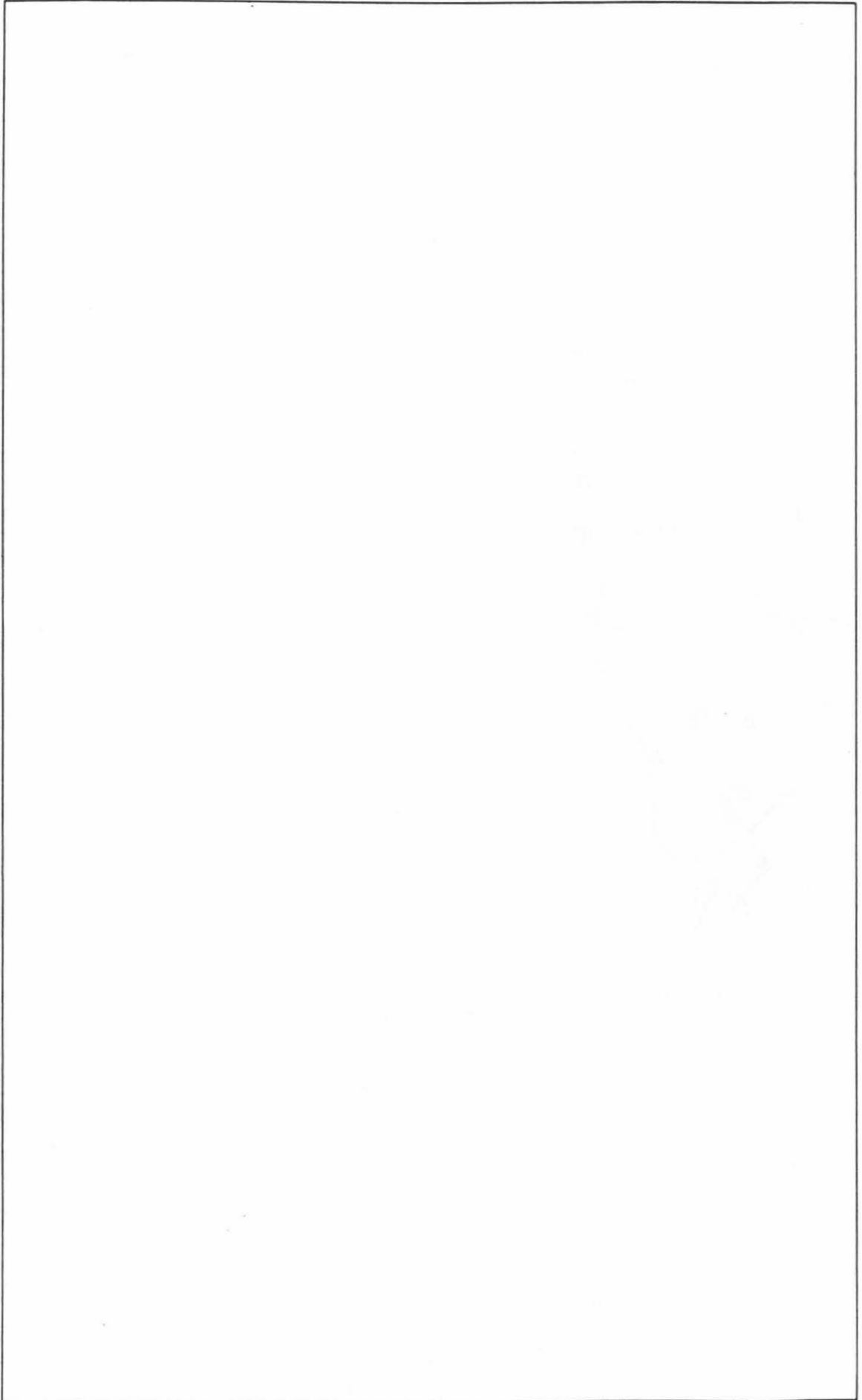
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
2226.6 + 2844	medium compact	95	4.3	D	8
2228.8 + 2938	medium compact	78	2.0	VD	7
2233.4 + 2759	compact	70	1.4	ED	5
2233.7 + 2945	compact	57	1.8	ED	6
2247.0 + 3000	medium compact	77	3.7	VD	4
2247.4 + 3235	compact	63	1.5	ED	3
2247.7 + 3208	compact	73	1.6	VD	2
2250.3 + 2919	open	70	1.7	ED	1
2252.6 + 3135	open	119	11.3	Near	9

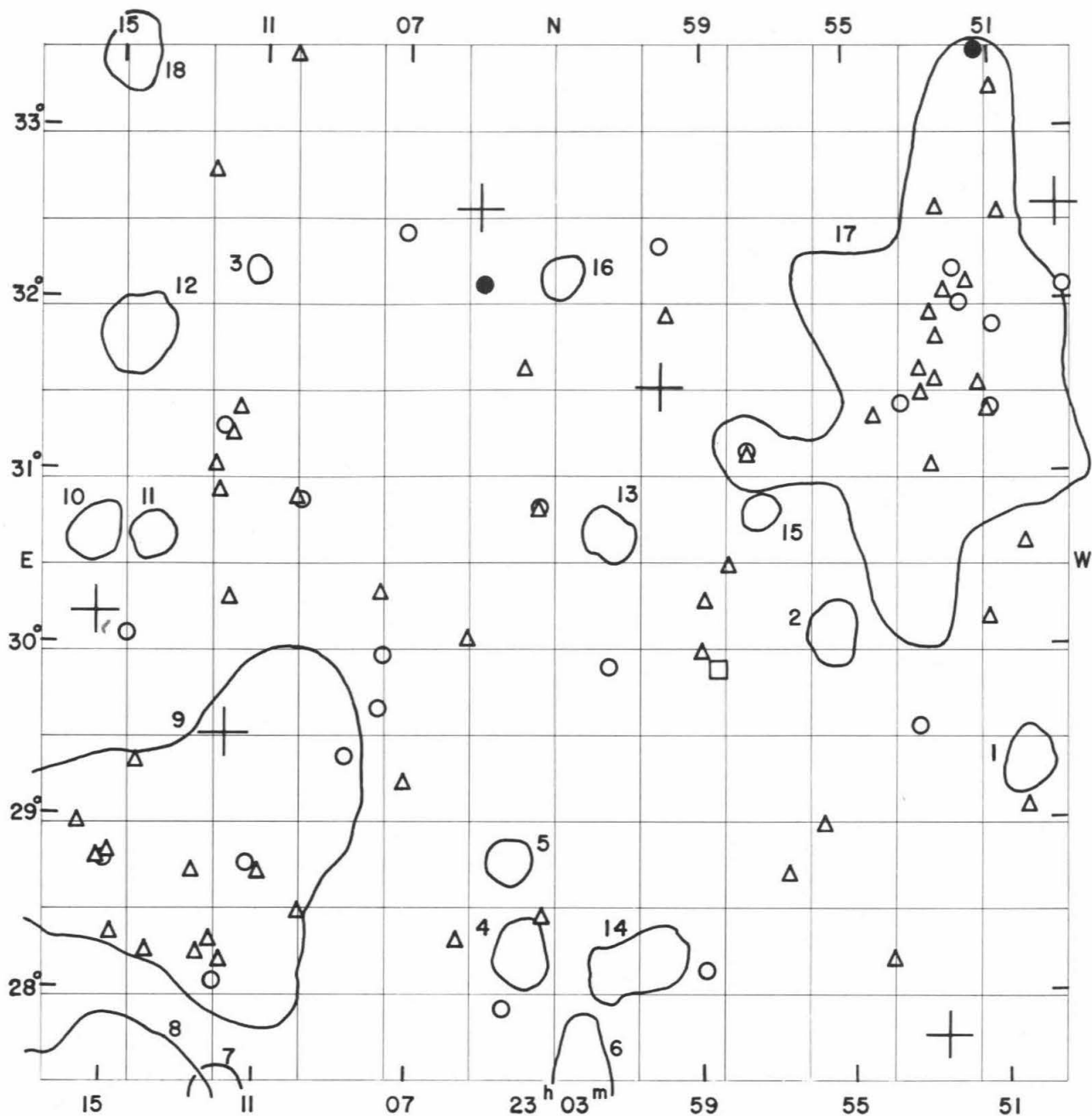
Average number of galaxies per cluster = 78.0

GALAXIES

Position			NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ				
h	m	o				
22	24.9	+ 31 15		15.4		
22	25.6	+ 28 51	7286	13.4		
22	26.1	+ 30 03	7292	13.1		
22	28.0	+ 31 26		15.6		
22	29.2	+ 30 42	7303+7304	13.7		plume
22	30.1	+ 30 35		15.1		
22	31.9	+ 32 37		15.6		extremely diffuse
22	37.0	+ 32 42		15.7		
22	38.0	+ 31 49		15.7		
22	38.1	+ 31 35		15.2		
22	38.2	+ 33 12		15.4		
22	38.8	+ 31 55		14.5		
22	39.0	+ 33 22		15.3		compact
22	39.7	+ 30 27	7356	15.0		
22	39.9	+ 32 57		15.3		
22	40.0	+ 29 55	7357	15.1		
22	40.3	+ 29 15		15.6		
22	40.3	+ 29 28		14.4		
22	40.5	+ 30 15		15.6		diffuse
22	40.5	+ 32 44		15.7		
22	42.4	+ 33 12		13.5		
22	43.3	+ 30 46		15.7		
22	44.0	+ 28 23		15.6		
22	44.8	+ 31 16		15.7		
22	45.0	+ 31 07		14.8		
22	45.7	+ 28 01		15.6		
22	45.8	+ 31 42		15.6		
22	45.9	+ 30 35		15.6		
22	46.4	+ 27 42		15.7		
22	46.4	+ 32 58		15.7		
22	46.7	+ 31 20		15.5		
22	46.8	+ 27 36		15.7		
22	47.2	+ 32 06		15.5		
22	47.2	+ 33 06		15.5		
22	47.8	+ 31 07		15.4		
22	48.6	+ 31 06		14.1		compact
22	48.7	+ 31 06		15.7		compact
22	49.0	+ 32 05		14.9		
22	50.2	+ 30 35		15.7		

Position			NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ				
h	m	o				
22	50.3	+ 29 03		15.7		
22	50.8	+ 32 30		15.6		
22	50.9	+ 31 52	7407	14.2		
22	50.9	+ 33 13		15.7		
22	51.3	+ 33 26		13.3		





FIELD No. 496
 $23^{\text{h}}03^{\text{m}} + 30^{\circ}30'$
 Survey Plate No. 1184

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	°	'	"	
31879	22	49	13.0	+	32	33 00	7.11
31958	22	52	32.2	+	27	44 33	7.30
32107	23	00	09.7	+	31	30 41	6.46
32212	23	05	04.4	+	32	33 11	7.8
32348	23	11	55.7	+	29	29 57	6.42
32434	23	15	27.5	+	30	11 06	7.21

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
2250.3 + 2919	open	70	1.7	ED	1
2252.6 + 3135	open	119	11.3	Near	17
2255.4 + 3005	medium compact	67	1.6	ED	2
2257.4 + 3047	compact	62	1.1	ED	15
2300.7 + 2810	medium compact	115	2.6	VD	14
2301.5 + 3040	medium compact	63	1.6	VD	13
2302.2 + 2729	compact	88	2.9	VD	6
2302.8 + 3209	medium compact	59	1.3	ED	16
2303.8 + 2813	compact	66	1.9	ED	4
2304.2 + 2846	medium compact	79	1.4	VD	5
2311.2 + 3211	compact	43	0.7	ED	3
2311.9 + 2724	medium compact	59	1.9	VD	7
2313.9 + 3038	medium compact	60	1.4	ED	11
2314.4 + 3147	medium compact	46	2.2	ED	12
2314.7 + 2723	open	106	5.4	D	8
2314.8 + 3325	medium compact	54	2.1	VD	18
2315.5 + 2854	open	165	12.3	Near	9
2315.5 + 3038	medium compact	57	1.6	ED	10

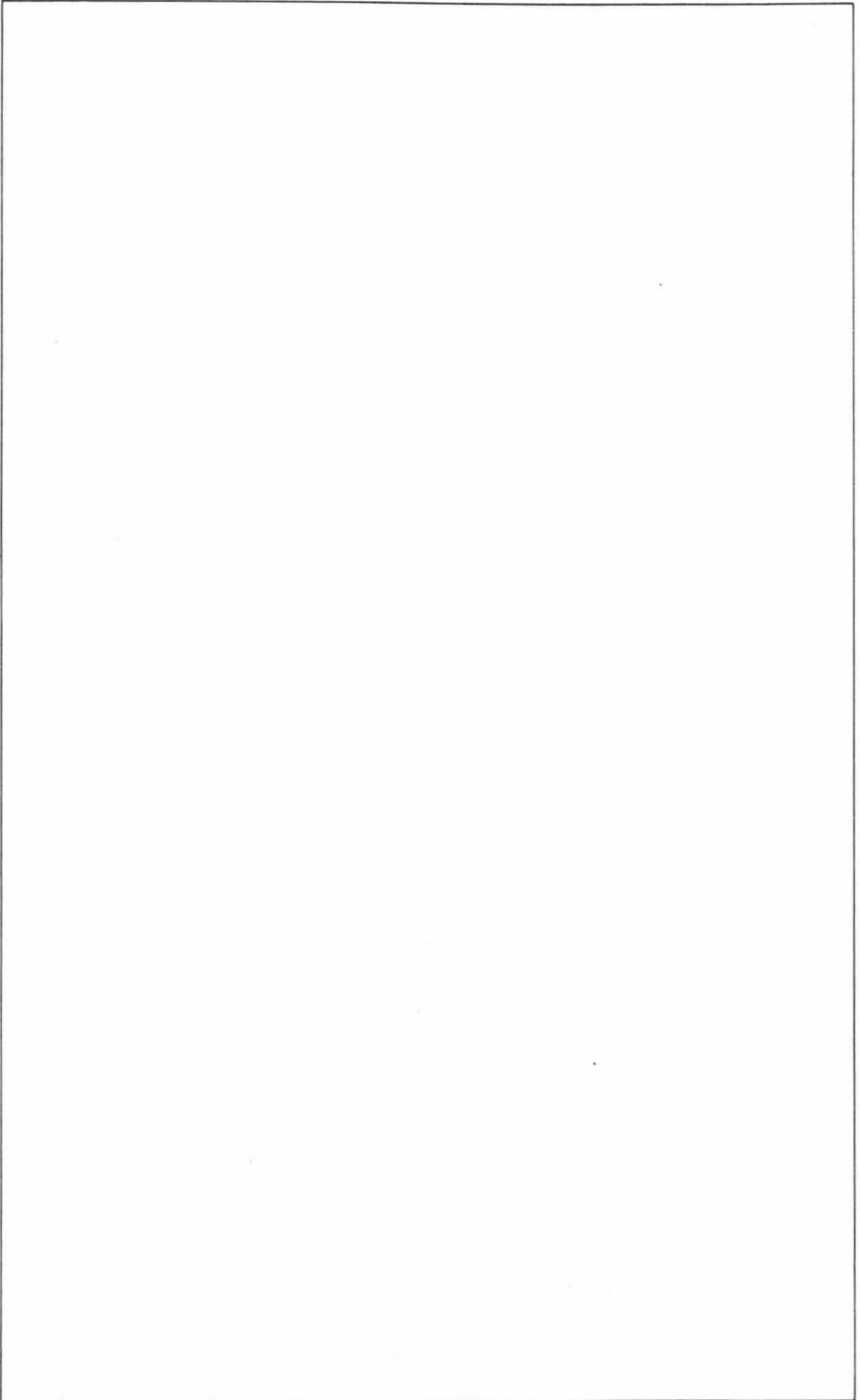
Average number of galaxies per cluster = 76.6

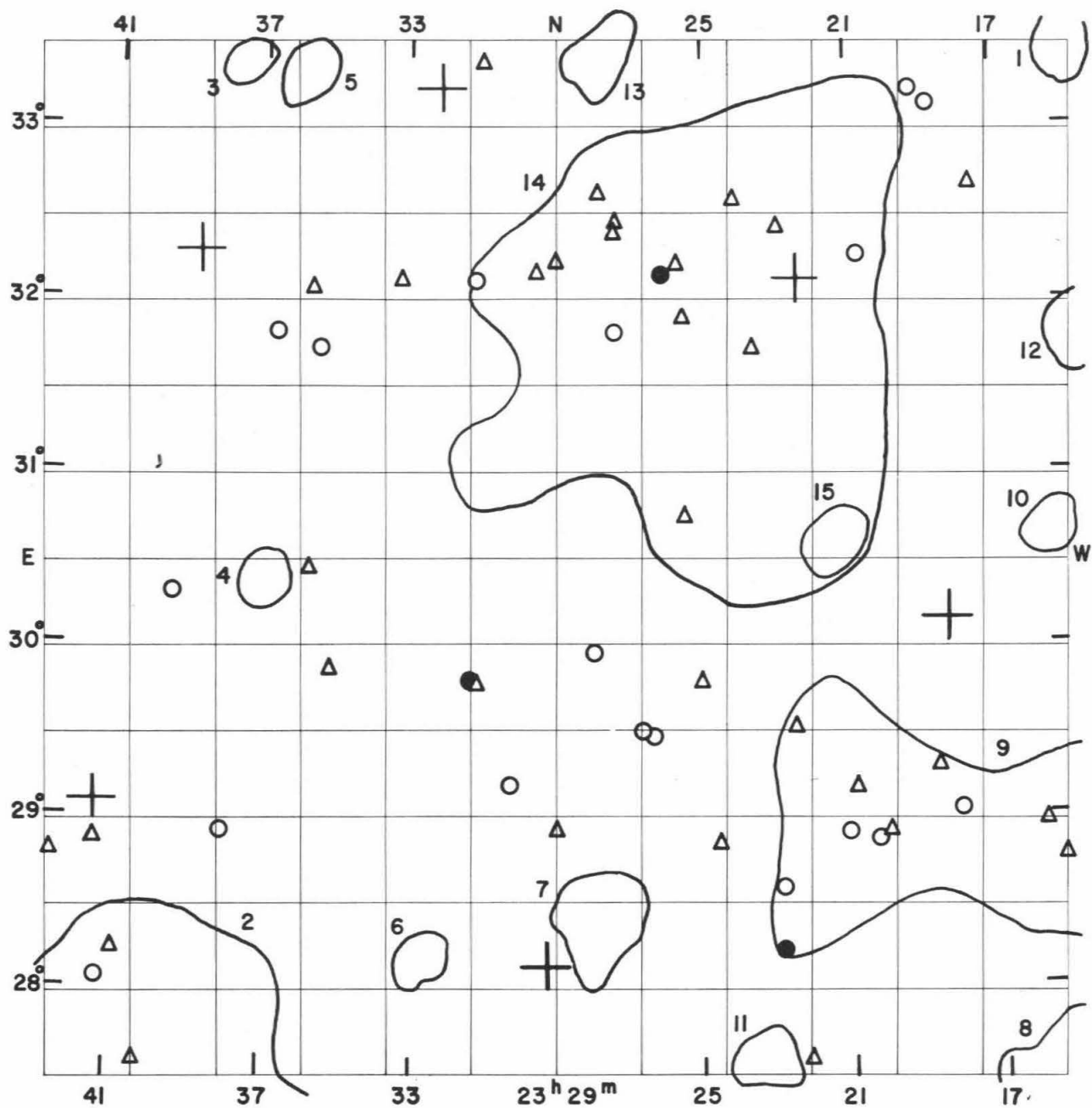
GALAXIES

Position			NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ				
h	m	o				
22	49.0	+ 32 05		14.9		
22	50.2	+ 30 35		15.7		
22	50.3	+ 29 03		15.7		
22	50.8	+ 32 30		15.6		
22	50.9	+ 31 52	7407	14.2		
22	50.9	+ 33 13		15.7		
22	51.1	+ 31 23		14.7		
22	51.2	+ 30 08		15.7		
22	51.2	+ 31 21		15.5		
22	51.3	+ 33 26		13.3		
22	51.4	+ 31 30		15.7		double nebula
22	51.7	+ 32 06		15.1		
22	51.9	+ 31 59		14.9		
22	52.1	+ 32 10		14.5		compact
22	52.3	+ 32 03		15.5		
22	52.5	+ 32 32		15.6		
22	52.6	+ 31 47		15.7		
22	52.7	+ 31 32		15.5		
22	52.8	+ 31 03		15.2		
22	52.8	+ 31 55		15.3		compact
22	53.1	+ 31 27		15.7		
22	53.1	+ 31 36		15.5		
22	53.2	+ 29 32	7420	14.9		
22	53.6	+ 31 24		14.9		
22	54.0	+ 28 10		15.4		
22	54.3	+ 31 20		15.7		
22	55.8	+ 28 58	7439	15.2		
22	56.8	+ 28 41		15.6		
22	57.8	+ 31 06		15.5		
22	57.8	+ 31 08		15.0		

NGC IC*	Position a 1950 δ			m_p	V_s km/sec	Remarks
	h	m	s			
22 58.3	+	30	28	15.1		
22 58.6	+	29	53	12.3	+ 525	$m_H = 12.3$ Sa
22 58.9	+	30	16	15.6		
22 59.0	+	28	08	15.0		compact
22 59.0	+	29	58	15.4		
23 00.0	+	31	55	15.7		
23 00.2	+	32	20	15.0		
23 01.5	+	29	54	14.8		
23 03.4	+	28	25	15.6		
23 03.4	+	30	50	14.6		compact
23 03.5	+	30	48	15.7		
23 03.8	+	31	37	15.3		
23 04.5	+	27	55	14.8		compact
23 05.0	+	32	06	13.5		
23 05.4	+	30	03	15.5		
23 05.7	+	28	18	15.7		
23 07.1	+	29	13	15.7		
23 07.1	+	32	24	14.8		
23 07.7	+	29	58	14.6		
23 07.8	+	29	39	14.8		double nebula
23 07.8	+	30	18	15.7		
23 08.7	+	29	22	14.2		
23 09.9	+	28	27	15.7		
23 09.9	+	30	52	14.1		
23 10.0	+	30	52	15.7		very compact
23 10.2	+	33	26	15.3		
23 11.0	+	28	41	15.4		
23 11.3	+	28	44	14.9		
23 11.6	+	31	22	15.7		compact
23 11.8	+	30	17	15.6		
23 11.8	+	31	13	15.6		
23 11.9	+	28	10	15.4		compact
23 12.0	+	31	17	14.5		
23 12.1	+	30	54	15.7		
23 12.2	+	28	03	14.1		
23 12.3	+	28	17	15.5		
23 12.3	+	31	02	15.7		
23 12.4	+	32	45	15.5		
23 12.6	+	28	12	15.7		
23 12.7	+	28	41	15.1		
23 13.9	+	28	13	15.4		
23 14.3	+	29	19	15.5		
23 14.6	+	30	04	14.1		
23 14.8	+	28	20	15.6		
23 15.0	+	28	47	15.7		compact
23 15.1	+	28	45	14.4		compact
23 15.3	+	28	45	15.6		compact
23 15.8	+	28	57	15.3		very compact

MAGNITUDES AND TYPES FROM OTHER SOURCES							
NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958
7457	-	-	12.78	S0	12.3	S0	- -





FIELD No. 497
 23^h 29^m + 30° 30'
 Survey Plate No. 914

GC STARS

Nos.	R.A.			Decl.			m _p
	h	m	s	°	'	"	
32507	23	18	22.3	+ 30	08	30	5.78
32577	23	22	23.6	+ 32	06	36	5.46
32719	23	29	14.0	+ 28	07	40	6.23
32779	23	32	09.5	+ 33	13	14	5.74
32902	23	38	47.3	+ 32	17	01	7.25
32954	23	41	28.2	+ 29	05	04	4.98

CLUSTERS OF GALAXIES

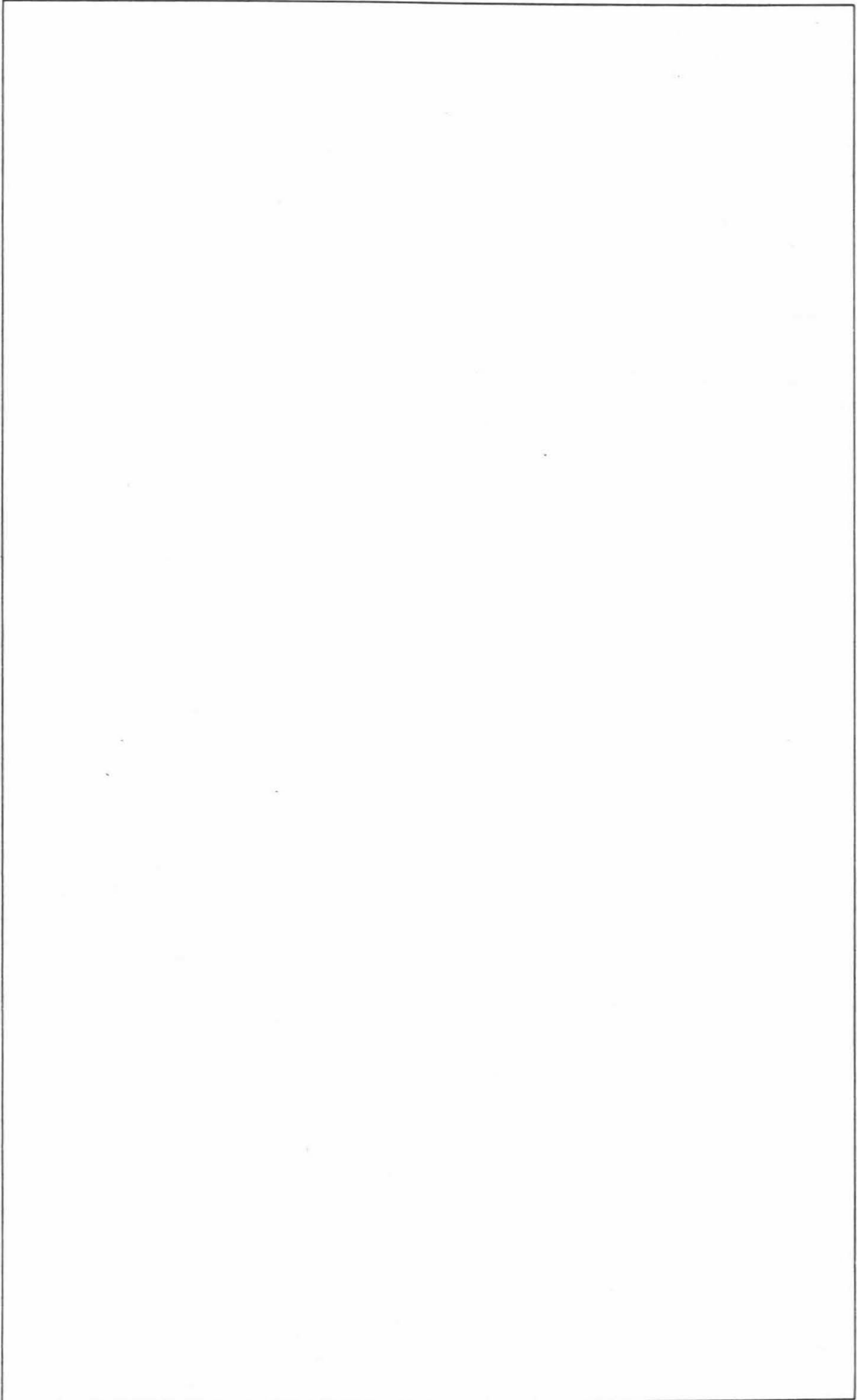
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
2314.4 + 3147	medium compact	46	2.2	ED	12
2314.7 + 2723	open	106	5.4	D	8
2314.8 + 3325	medium compact	54	2.1	VD	1
2315.5 + 2854	open	165	12.3	Near	9
2315.5 + 3038	medium compact	57	1.6	ED	10
2321.3 + 3035	compact	66	2.1	ED	15
2323.4 + 2734	medium compact	61	2.1	VD	11
2324.7 + 3145	open	189	14.4	Near	14
2327.8 + 2824	medium compact	63	3.1	D	7
2327.8 + 3323	medium compact	83	2.2	VD	13
2332.6 + 2810	medium compact	88	1.7	ED	6
2335.5 + 2449	medium compact	970	32.3	Near	2
2335.9 + 3318	medium compact	101	1.9	VD	5
2336.9 + 3022	medium compact	67	1.7	ED	4
2337.5 + 3322	compact	65	1.5	ED	3

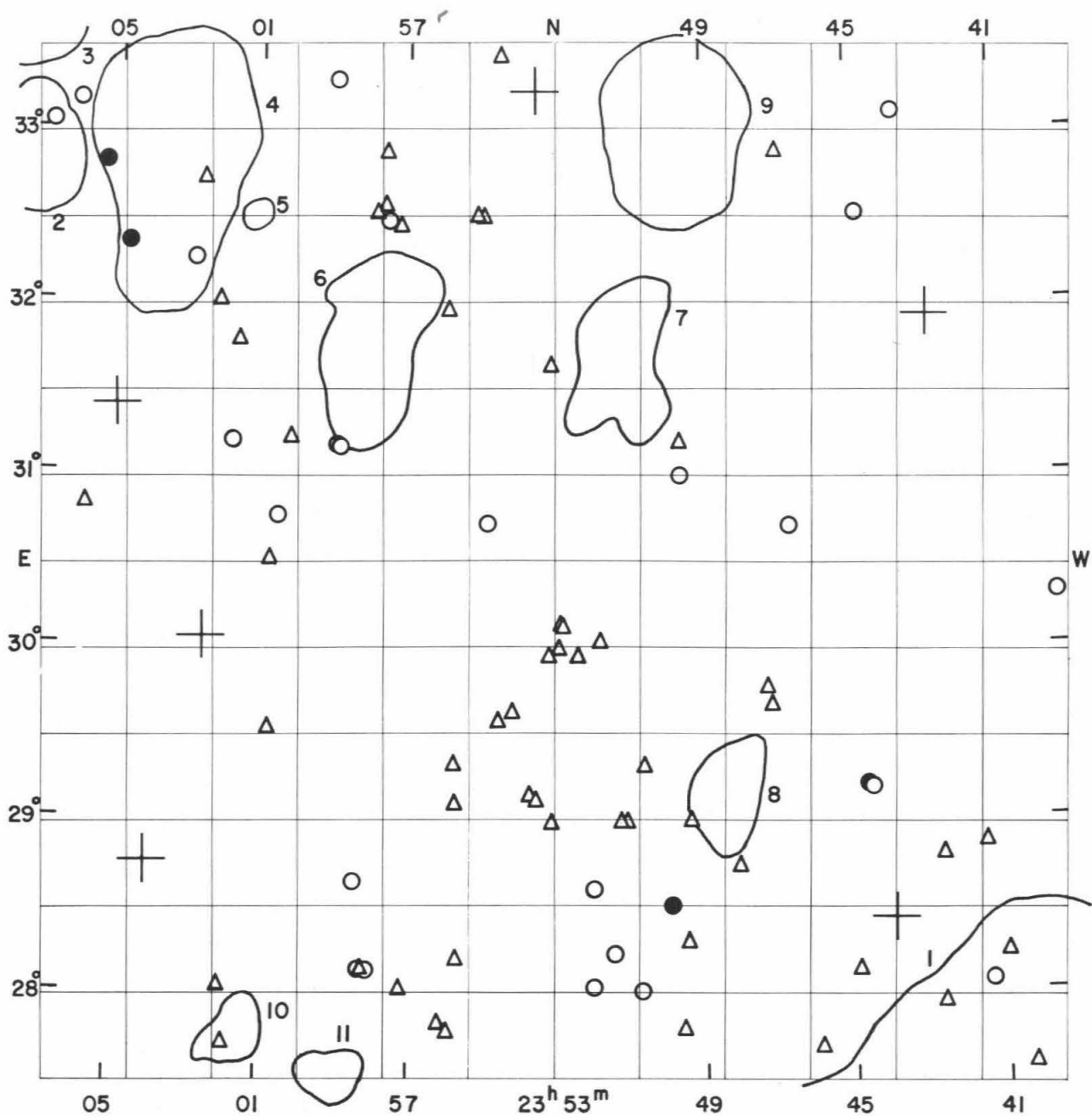
Average number of galaxies per cluster = 145.4

GALAXIES

Position			NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ				
h	m	o				
23	15.3	+ 28 45		15.6		compact
23	15.8	+ 28 57		15.3		very compact
23	17.6	+ 32 40		15.6		
23	18.1	+ 29 02		14.9		
23	18.7	+ 29 17		15.4		extremely diffuse, compact nucleus
23	18.7	+ 33 08		14.7		
23	19.2	+ 33 13		15.0		
23	20.0	+ 28 55		15.3		
23	20.3	+ 28 52		15.0		
23	20.7	+ 32 15		14.5		peculiar
23	20.9	+ 29 09		15.5		
23	21.1	+ 28 55		14.8		
23	22.2	+ 27 34		15.7		compact
23	22.5	+ 29 31		15.6		
23	22.9	+ 28 13		14.0		
23	22.9	+ 28 35		15.0		
23	23.0	+ 32 24		15.6		very diffuse
23	23.7	+ 31 43		15.7		
23	24.2	+ 32 35		15.7		
23	24.6	+ 28 51		15.6		
23	25.0	+ 29 47		15.5		double system
23	25.5	+ 30 44		15.7		very diffuse
23	25.5	+ 31 54		15.1		
23	25.7	+ 32 12		15.5		
23	26.1	+ 32 08	7680	13.5		
23	26.3	+ 29 27		15.0		
23	26.6	+ 29 30		15.0		
23	27.3	+ 32 25		15.6		
23	27.4	+ 31 49		15.0		
23	27.4	+ 32 23		15.1		
23	27.8	+ 32 37		15.5		
23	27.9	+ 29 57		14.9		
23	29.0	+ 28 55		15.7		diffuse

Position				NGC IC*	m_p	V_s km/sec	Remarks
α h	1950 m	δ o	'				
23	29.0	+ 32	12		15.1		
23	29.5	+ 32	08		15.5		
23	30.2	+ 29	11		14.5		
23	31.0	+ 33	22		15.7		interacting double system
23	31.2	+ 29	46		15.1		double system
23	31.2	+ 32	06		14.5		
23	31.3	+ 29	48		13.5		
23	33.2	+ 32	06		15.6		
23	35.2	+ 29	52		15.5		very compact
23	35.4	+ 31	43		14.1		
23	35.7	+ 30	25		15.1		
23	35.7	+ 32	03		15.6		
23	36.6	+ 31	49		14.8		
23	38.0	+ 28	55	7729	14.6		
23	39.4	+ 30	19		14.4		
23	40.2	+ 27	34		15.7		very compact
23	40.8	+ 28	13		15.7		
23	41.3	+ 28	04		15.0		
23	41.4	+ 28	52		15.7		northern of two
23	42.6	+ 28	48		15.5		





FIELD No. 498
 $23^{\text{h}}53^{\text{m}} + 30^{\circ}30'$
 Survey Plate No. 606

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	o	'	"	
32978	23	42	51.5	+	31	54 50	8.8
32997	23	43	54.1	+	28	25 33	7.25
33198	23	53	34.7	+	33	12 35	6.96
53	0	02	34.9	+	30	03 04	8.4
95	0	04	00.7	+	28	44 44	6.20
110	0	05	00.2	+	31	23 27	7.01

CLUSTERS OF GALAXIES

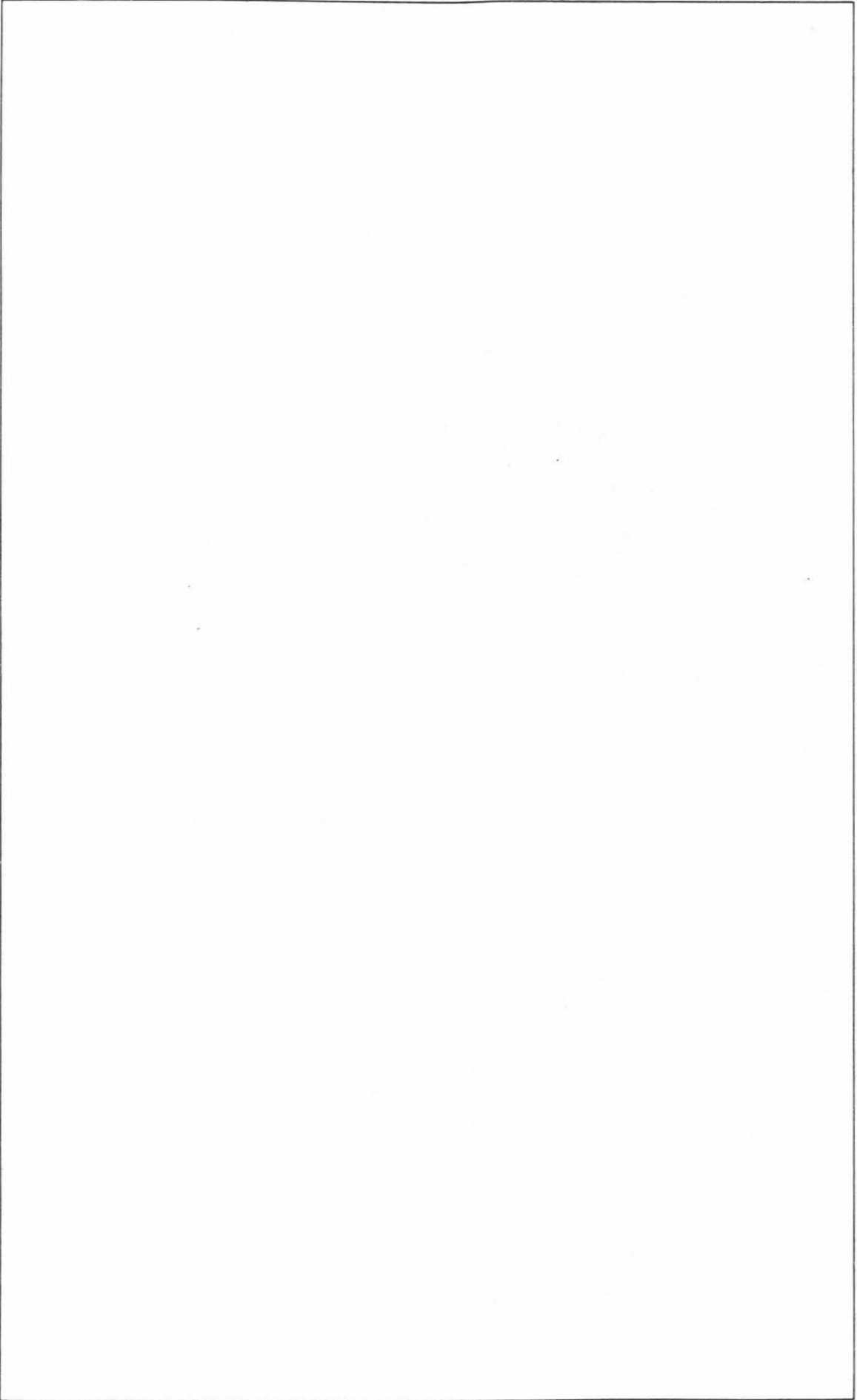
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
2335.5 + 2449	medium compact	970	32.3	Near	1
2348.4 + 2908	compact	87	2.9	VD	8
2349.7 + 3259	open	170	5.3	MD	9
2351.2 + 3138	medium compact	78	4.0	VD	7
2358.0 + 3145	medium compact	138	4.6	D	6
2359.0 + 2731	medium compact	53	1.9	ED	11
0001.3 + 3230	medium compact	37	0.9	ED	5
0001.7 + 2746	medium compact	65	2.0	ED	10
0003.6 + 3250	open	135	6.5	MD	4
0007.4 + 3254	medium compact	86	3.8	D	2
0007.8 + 3348	open	105	4.7	VD	3

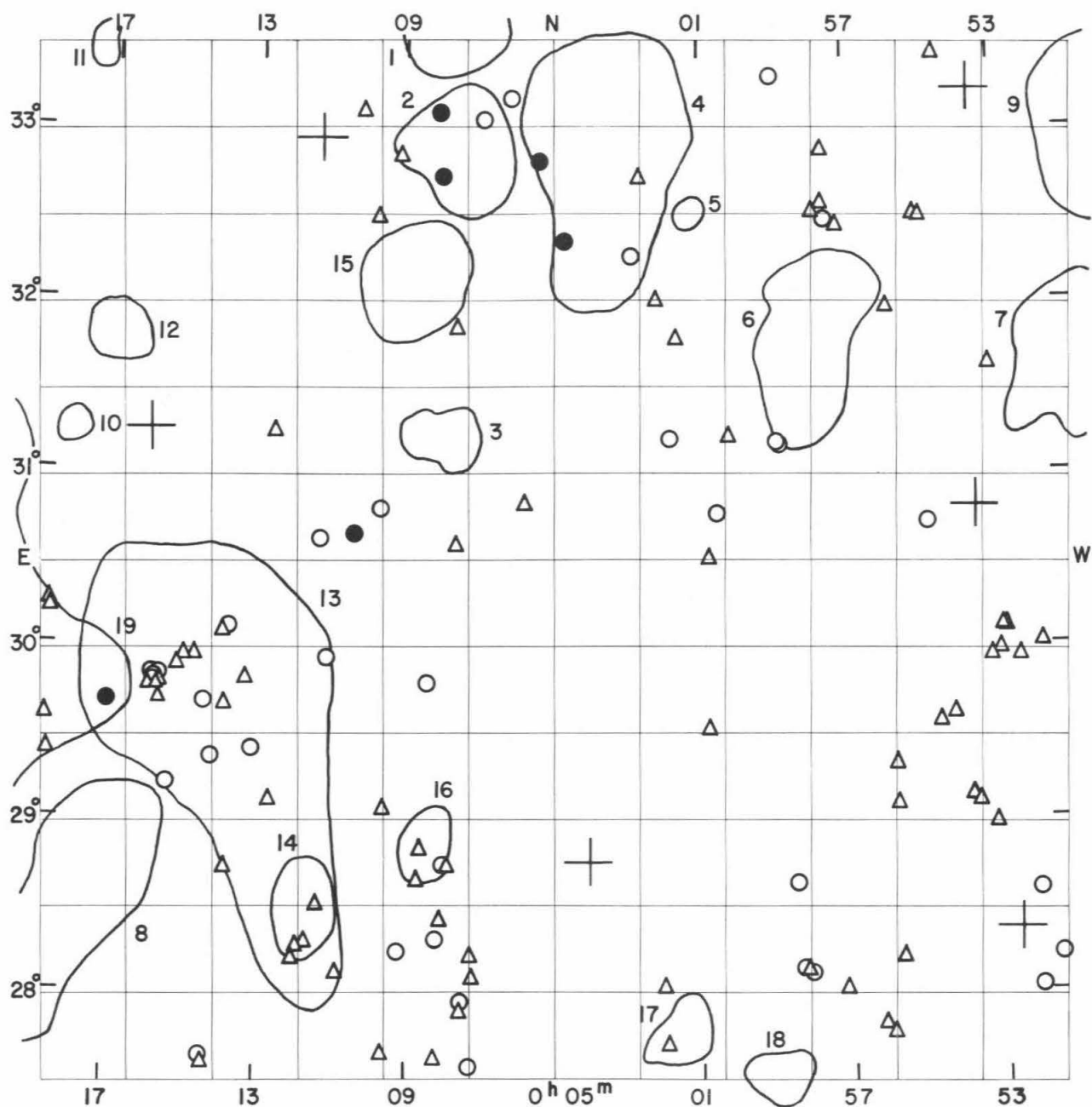
Average number of galaxies per cluster = 174.9

GALAXIES

Position				NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ					
h	m	o	i				
23	39.4	+ 30	19		14.4		
23	40.2	+ 27	34		15.7		very compact
23	40.8	+ 28	13		15.7		
23	41.3	+ 28	04		15.0		
23	41.4	+ 28	52		15.7		northern of two
23	42.6	+ 28	48		15.5		
23	42.7	+ 27	56		15.3		compact
23	43.7	+ 33	06		14.2		
23	44.5	+ 29	10	7752	14.3	+ 4868	} connected double system
23	44.6	+ 29	12	7753	13.2	+ 4845	
23	44.7	+ 32	31	5355*	14.4		
23	44.9	+ 28	07		15.1		
23	45.9	+ 27	40		15.6		very compact
23	46.7	+ 30	42	7760	14.8		very compact
23	46.9	+ 32	53		15.7		
23	47.2	+ 29	40		15.5		
23	47.3	+ 29	46		15.3		
23	48.0	+ 28	43		15.2		
23	49.3	+ 29	00		15.7		
23	49.4	+ 28	18		15.7		
23	49.6	+ 27	48		15.7		
23	49.7	+ 31	00	7773	14.5		
23	49.7	+ 31	11		15.6		
23	49.9	+ 28	30	7775	13.9		
23	50.6	+ 29	18		15.7		
23	50.7	+ 28	01	7777	14.5		
23	51.1	+ 28	59		15.3		very compact
23	51.2	+ 28	59		15.7		diffuse
23	51.4	+ 28	13		14.4		compact
23	51.8	+ 30	01		15.3		
23	52.0	+ 28	02		14.7		
23	52.0	+ 28	36		14.3		
23	52.4	+ 29	56		15.6		
23	52.8	+ 30	07		15.5		
23	52.8	+ 30	08		15.6		
23	52.9	+ 29	59		15.7		
23	53.1	+ 28	59		15.5		

Position			NGC IC*	m_p	V_s km/sec	Remarks
α	1950	δ				
h	m	o				
23	53.2	+ 29 56		15.2		compact
23	53.2	+ 31 38		15.4		extremely diffuse
23	53.6	+ 29 07		15.6		
23	53.7	+ 29 09		15.4		
23	54.2	+ 29 37		15.7		
23	54.5	+ 29 35		15.2		
23	54.5	+ 33 25		15.7		diffuse
23	54.8	+ 30 43		14.7		
23	55.0	+ 32 30		15.6		
23	55.1	+ 32 30		15.7		
23	55.7	+ 28 11		15.7		
23	55.7	+ 29 06		15.4		
23	55.7	+ 29 19		15.3		
23	55.9	+ 27 45		15.5		compact
23	55.9	+ 31 58		15.3		diffuse
23	56.2	+ 27 49		15.7		compact
23	57.2	+ 28 01		15.6		compact
23	57.3	+ 32 25	5369*	15.3		
23	57.6	+ 32 28	5370*	14.9		
23	57.6	+ 32 52		15.4		
23	57.7	+ 32 34	5371*	15.7		
23	57.9	+ 32 31	5373*	15.1		double nebula
23	58.0	+ 28 07		14.9		
23	58.1	+ 28 08		15.5		
23	58.2	+ 28 08		14.4		compact
23	58.4	+ 28 39		14.8		
23	58.8	+ 31 09	7805	14.3		} interacting double system
23	58.9	+ 31 10	7806	14.4		
23	59.0	+ 33 18		15.0		
0	00.3	+ 31 12		15.6		
0	00.6	+ 30 45		15.0		
0	00.8	+ 29 31		15.7		
0	00.8	+ 30 30		15.7		
0	01.7	+ 31 47		15.7		diffuse
0	01.8	+ 31 12	7819	14.3		
0	01.9	+ 27 42		15.7		
0	02.0	+ 28 02		15.2		compact
0	02.2	+ 32 00		15.6		
0	02.7	+ 32 42		15.4		double system
0	02.8	+ 32 15		15.0		
0	04.7	+ 32 20	1530*	13.4		
0	05.4	+ 32 48		13.8		
0	05.8	+ 30 50		15.7		
0	06.2	+ 33 10	13	14.2		
0	06.9	+ 33 03	20	14.5		





FIELD No. 499
 $0^h 05^m + 30^\circ 30'$
 Survey Plate No. 1257

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	°	'	"	
33168	23	52	29.1	+	28	21 18	7.30
33195	23	53	31.9	+	30	48 02	7.51
33198	23	53	34.7	+	33	12 35	6.96
95	0	04	00.7	+	28	44 44	6.20
256	0	11	26.1	+	32	55 42	6.06
373	0	16	01.2	+	31	14 23	5.80

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
2349.7 + 3259	open	170	5.3	MD	9
2351.2 + 3138	medium compact	78	4.0	VD	7
2358.0 + 3145	medium compact	138	4.6	D	6
2359.0 + 2731	medium compact	53	1.9	ED	18
0001.3 + 3230	medium compact	37	0.9	ED	5
0001.7 + 2746	medium compact	65	2.0	ED	17
0003.6 + 3250	open	135	6.5	MD	4
0007.4 + 3254	medium compact	86	3.8	D	2
0007.8 + 3348	open	105	4.7	VD	1
0008.0 + 3113	medium compact	104	2.2	VD	3
0008.4 + 2851	compact	80	2.0	ED	16
0008.9 + 3207	compact	100	3.7	VD	15
0011.6 + 2828	medium compact	86	2.6	ED	14
0013.6 + 2927	medium compact	145	9.5	Near	13
0016.9 + 3148	compact	144	2.0	VD	12
0017.6 + 3327	compact	87	1.2	ED	11
0018.1 + 3116	compact	45	1.1	ED	10
0018.9 + 2818	compact	248	7.0	D	8
0024.4 + 3014	open	144	16.3	Near	19

Average number of galaxies per cluster = 107.9

GALAXIES

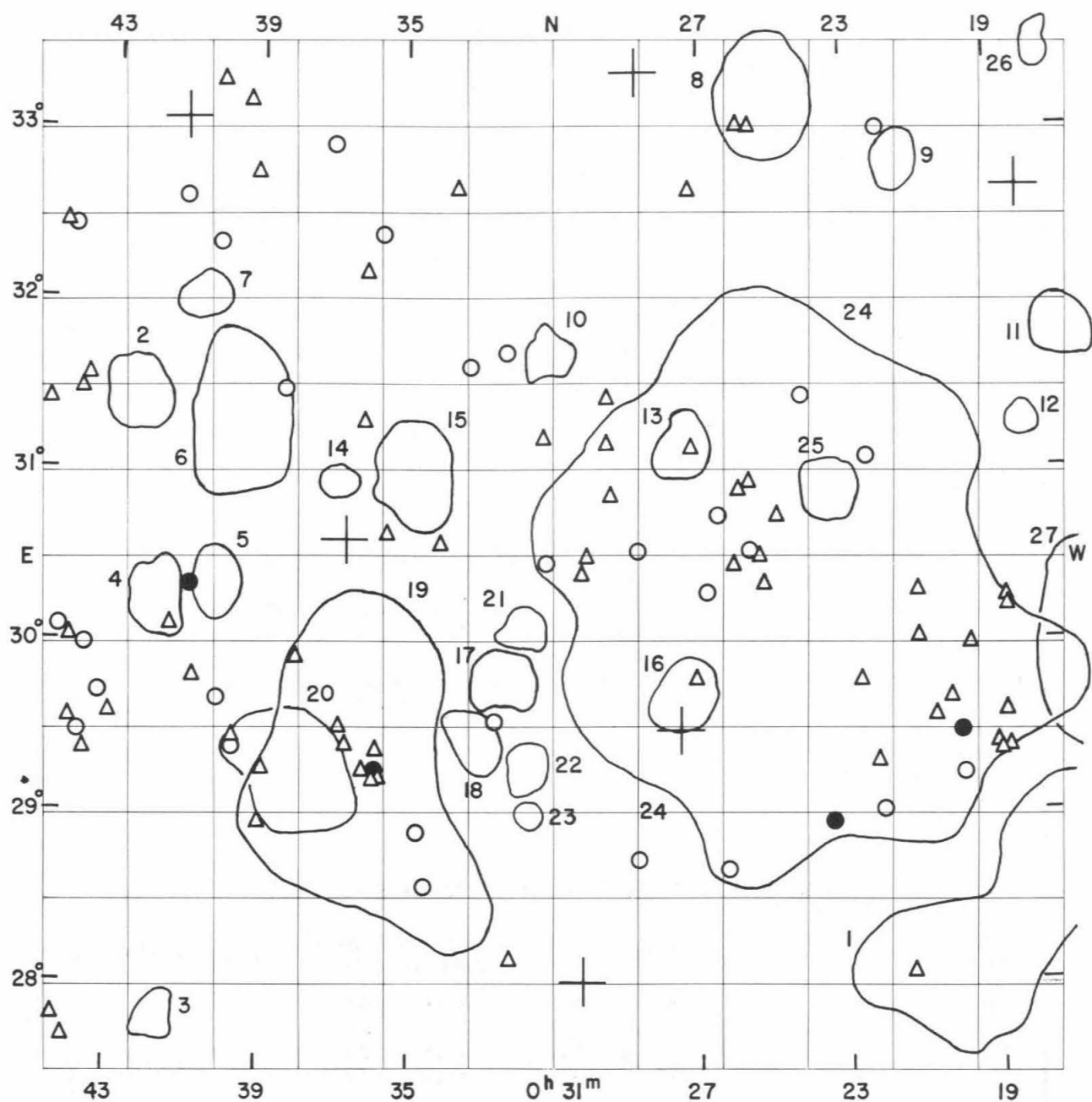
Position			NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ				
h	m	o				
23	51.4	+ 28 13		14.4		compact
23	51.8	+ 30 01		15.3		
23	52.0	+ 28 02		14.7		
23	52.0	+ 28 36		14.3		
23	52.4	+ 29 56		15.6		extremely diffuse
23	52.8	+ 30 07		15.5		
23	52.8	+ 30 08		15.6		
23	52.9	+ 29 59		15.7		
23	53.1	+ 28 59		15.5		diffuse
23	53.2	+ 29 56		15.2		
23	53.2	+ 31 38		15.4		
23	53.6	+ 29 07		15.6		
23	53.7	+ 29 09		15.4		compact
23	54.2	+ 29 37		15.7		
23	54.5	+ 29 35		15.2		
23	54.5	+ 33 25		15.7		
23	54.8	+ 30 43		14.7		compact
23	55.0	+ 32 30		15.6		
23	55.1	+ 32 30		15.7		
23	55.7	+ 28 11		15.7		
23	55.7	+ 29 06		15.4		diffuse
23	55.7	+ 29 19		15.3		
23	55.9	+ 27 45		15.5		
23	55.9	+ 31 58		15.3		
23	56.2	+ 27 49		15.7		compact
23	57.2	+ 28 01		15.6		
23	57.3	+ 32 25	5369*	15.3		
23	57.6	+ 32 28	5370*	14.9		
23	57.6	+ 32 52		15.4		

Position a 1950 δ h m o s				NGC IC*	m_p	V_s km/sec	Remarks
23	57.7	+ 32	34	5371*	15.7		
23	57.9	+ 32	31	5373*	15.1		double nebula
23	58.0	+ 28	07		14.9		
23	58.1	+ 28	08		15.5		
23	58.2	+ 28	08		14.4		compact
23	58.4	+ 28	39		14.8		
23	58.8	+ 31	09	7805	14.3		} interacting double system
23	58.9	+ 31	10	7806	14.4		
23	59.0	+ 33	18		15.0		
0	00.3	+ 31	12		15.6		
0	00.6	+ 30	45		15.0		
0	00.8	+ 29	31		15.7		
0	00.8	+ 30	30		15.7		
0	01.7	+ 31	47		15.7		diffuse
0	01.8	+ 31	12	7819	14.3		
0	01.9	+ 27	42		15.7		
0	02.0	+ 28	02		15.2		compact
0	02.2	+ 32	00		15.6		
0	02.7	+ 32	42		15.4		double system
0	02.8	+ 32	15		15.0		
0	04.7	+ 32	20	1530*	13.4		
0	05.4	+ 32	48		13.8		
0	05.8	+ 30	50		15.7		
0	06.2	+ 33	10	13	14.2		
0	06.9	+ 33	03	20	14.5		
0	07.2	+ 27	34	22	14.9		
0	07.2	+ 28	05		15.1		
0	07.2	+ 28	12		15.7		very compact
0	07.4	+ 27	53		15.7		
0	07.4	+ 27	56		14.7		
0	07.7	+ 30	35		15.6		very diffuse
0	07.7	+ 31	50		15.2		
0	07.8	+ 28	43		15.7		diffuse
0	07.9	+ 28	44	27	14.5		
0	08.0	+ 28	24		15.6		
0	08.0	+ 32	43		13.9		
0	08.1	+ 33	05	29	13.5		
0	08.2	+ 27	36		15.7		very compact
0	08.2	+ 28	18		15.0		
0	08.4	+ 29	47		14.8		
0	08.6	+ 28	50		15.7		
0	08.7	+ 28	38		15.1		
0	09.2	+ 28	14		14.8		
0	09.2	+ 32	50		15.4		compact
0	09.6	+ 27	38		15.3		
0	09.6	+ 29	03		15.6		double system
0	09.7	+ 30	47	39	14.4		
0	09.8	+ 32	29		15.7		
0	10.2	+ 33	06		15.2		very diffuse
0	10.4	+ 30	39	43	13.9		
0	10.8	+ 28	06		15.5		
0	11.1	+ 29	55		14.7		
0	11.3	+ 28	30		15.7		diffuse
0	11.3	+ 30	37		14.2		
0	11.6	+ 28	16		15.3		compact
0	11.8	+ 28	14		15.5		compact
0	12.0	+ 28	10		15.7		
0	12.6	+ 31	13		15.6		very compact
0	12.7	+ 29	05		15.7		compact

Position				NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ					
h	m	o	r				
0	13.1	+	29 23		14.6		
0	13.3	+	29 48		15.7		
0	13.8	+	28 42		15.2		
0	13.8	+	30 06		14.8		
0	13.9	+	29 39		15.7		very diffuse
0	13.9	+	30 05		15.6		
0	14.2	+	29 20		14.8		
0	14.3	+	27 35		15.1		
0	14.3	+	27 37		14.7		compact
0	14.4	+	29 40		14.8		
0	14.7	+	29 56		15.3		
0	15.0	+	29 56		15.5		very diffuse
0	15.2	+	29 53		15.7		
0	15.4	+	29 11		14.8		very compact
0	15.6	+	29 40		15.6		
0	15.6	+	29 47	67	15.7		
0	15.7	+	29 46	69	15.7	+ 6637	compact
0	15.7	+	29 48	68	14.5	+ 5787	} interacting triple system
0	15.8	+	29 47	71	14.8	+ 6591	
0	15.8	+	29 49	70≡1539*	14.5		
0	15.9	+	29 46	72	15.0	+ 6976	
0	16.0	+	29 45		15.1		compact
0	17.0	+	29 40	76	14.0		compact
0	18.6	+	29 22		15.3		compact
0	18.6	+	30 11		15.2		
0	18.7	+	29 35		15.6		
0	18.7	+	30 14		15.3		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
68	-	-	14.68	S0	14.6	S0	-	-
69	-	-	15.89	SB0	15.9	SB0	-	-
71	-	-	14.92	E2	14.8	E2	-	-
72	-	-	14.75	SBa	14.7	SBa	-	-



FIELD No. 500

$0^{\text{h}}31^{\text{m}} + 30^{\circ}30'$

Survey Plate No. 1244

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	°	'	"	
414	0	18	08.2	+ 32	38	03	5.97
583	0	27	28.7	+ 29	28	34	5.26
611	0	28	45.9	+ 33	18	21	6.08
647	0	30	10.4	+ 28	00	16	6.38
774	0	36	38.8	+ 30	35	15	3.49
867	0	41	10.5	+ 33	02	13	7.02

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0013.6 + 2927	medium compact	145	9.5	Near	27
0016.9 + 3148	compact	144	2.0	VD	11
0017.6 + 3327	compact	87	1.2	ED	26
0018.1 + 3116	compact	45	1.1	ED	12
0018.9 + 2818	compact	248	7.0	D	1
0021.5 + 3247	medium compact	61	1.7	ED	9
0023.4 + 3051	medium compact	70	1.9	ED	25
0024.4 + 3014	open	144	16.3	Near	24
0025.1 + 3310	compact	108	3.5	D	8
0027.4 + 2941	medium compact	92	2.1	ED	16
0027.4 + 3107	medium compact	79	1.9	ED	13
0031.1 + 3141	medium compact	69	1.6	ED	10
0031.6 + 2859	compact	43	0.9	ED	23
0031.7 + 2916	medium compact	71	1.5	ED	22
0031.8 + 3004	medium compact	60	1.4	ED	21
0032.3 + 2947	compact	133	2.0	ED	17
0033.1 + 2925	compact	55	1.9	VD	18
0034.8 + 3059	medium compact	88	2.9	VD	15
0036.3 + 2914	open	118	8.5	Near	19
0036.8 + 3056	compact	37	1.2	ED	14
0038.0 + 2914	medium compact	104	4.0	MD	20
0039.4 + 3117	open	104	4.2	VD	6
0040.1 + 3019	compact	54	1.9	ED	5
0040.5 + 3200	medium compact	79	1.6	ED	7
0041.6 + 2748	compact	66	1.4	ED	3
0041.8 + 3014	medium compact	75	2.1	ED	4
0042.3 + 3125	compact	71	2.2	ED	2

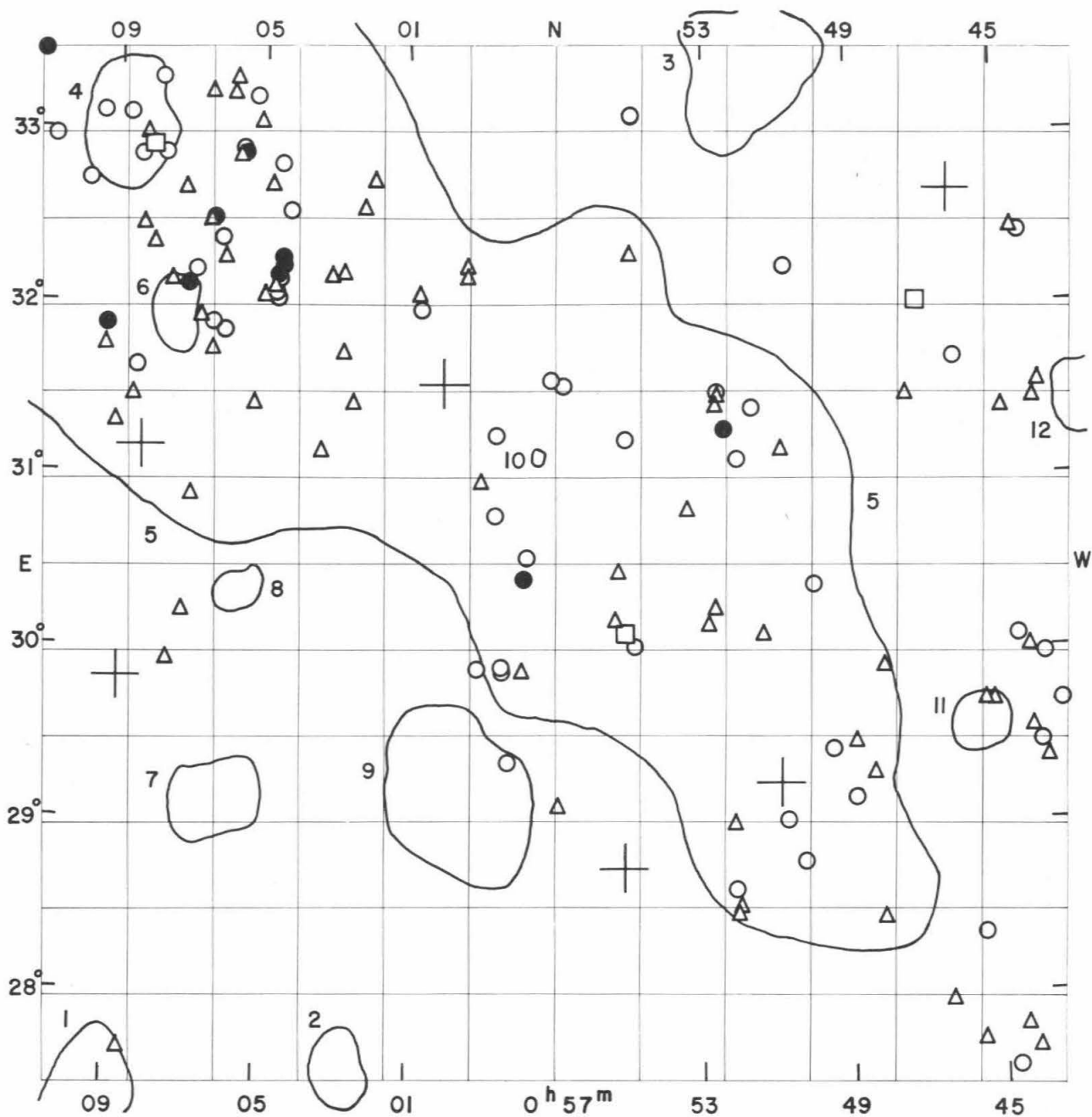
Average number of galaxies per cluster = 90.7

GALAXIES

Position			NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ				
h	m	o				
0	18.6	+ 29 22		15.3		compact
0	18.6	+ 30 11		15.2		
0	18.7	+ 29 35		15.6		
0	18.7	+ 30 14		15.3		
0	18.8	+ 29 21		15.1		
0	18.9	+ 29 23		15.6		
0	19.7	+ 29 58		15.2		compact
0	19.8	+ 29 13		14.9		
0	19.9	+ 29 28	97	13.5		compact
0	20.2	+ 29 40		15.5		
0	20.6	+ 29 33		15.4		
0	21.0	+ 30 00		15.6		
0	21.1	+ 30 17		15.1		compact
0	21.3	+ 28 03		15.3		
0	22.0	+ 29 00		14.8		
0	22.0	+ 32 59		14.7		
0	22.2	+ 29 17		15.6		diffuse
0	22.4	+ 31 05		14.4		
0	22.6	+ 29 46		15.5		diffuse
0	23.3	+ 28 56	108	13.3		
0	24.2	+ 31 25	112	14.5		

Position a 1950 δ				NGC IC*	m_p	V_s km/sec	Remarks
h	m	o	'				
0	24.9	+	30 43		15.6		
0	25.3	+	30 20		15.6		
0	25.4	+	30 29		15.6		
0	25.6	+	33 00		15.6		
0	25.7	+	30 32		14.3		
0	25.7	+	30 55		15.1		
0	25.9	+	30 53		15.3		
0	25.9	+	33 00		15.1		
0	26.1	+	30 25		15.4		
0	26.2	+	28 40		15.0		
0	26.5	+	30 43		15.0		
0	26.8	+	30 17		14.8		interacting double system
0	27.1	+	29 47		15.4		
0	27.2	+	31 07		15.3		
0	27.3	+	32 37		15.7		
0	28.6	+	28 43		14.8		
0	28.7	+	30 31	140	14.2		
0	29.4	+	30 51		15.7		
0	29.5	+	31 08		15.7		
0	29.5	+	31 24		15.1		
0	30.0	+	30 28		15.2		
0	30.2	+	30 22		15.1		
0	31.2	+	30 27	149	15.0		compact
0	31.3	+	31 10		15.7		extremely diffuse
0	32.2	+	28 08		15.6		
0	32.3	+	31 40		14.8		
0	32.6	+	29 32		15.0		
0	33.3	+	31 36		14.5		
0	33.7	+	32 38		15.2		
0	34.1	+	30 34		15.6		
0	34.4	+	28 34		15.0		
0	34.7	+	28 53		15.0		
0	35.5	+	30 37		15.3		very compact
0	35.7	+	29 12	181	15.4		
0	35.7	+	32 22		14.9		
0	35.8	+	29 15	183	13.8		compact
0	35.8	+	29 21		15.2		
0	35.9	+	29 10	184	15.5		
0	36.1	+	32 08		15.3		
0	36.2	+	29 15		15.7		compact
0	36.2	+	31 16		15.4		compact
0	36.6	+	29 23		15.2		
0	36.8	+	29 29		15.5		
0	37.0	+	32 53		14.9		
0	38.0	+	29 53		15.1		very compact
0	38.3	+	31 27		14.6		
0	38.9	+	29 15		15.4		
0	39.0	+	28 55		15.4		
0	39.2	+	32 43		15.4		diffuse
0	39.4	+	33 08		15.5		
0	39.7	+	29 22	43*	14.4		
0	39.7	+	29 25		15.3		
0	40.1	+	29 39		14.7		
0	40.1	+	33 15		15.5		with jet
0	40.2	+	32 18	226	14.4		
0	40.8	+	29 47		15.7		
0	41.0	+	30 19	233	13.8		
0	41.1	+	32 35		14.5		
0	41.4	+	30 05		15.1		compact

Position			NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ				
h	m	o ' "				
0	43.0	+ 29 33		15.7		
0	43.3	+ 29 41	243	14.6		
0	43.7	+ 29 21		15.7		diffuse
0	43.7	+ 29 58		14.5		
0	43.8	+ 29 27		15.0		
0	43.8	+ 31 32		15.3		
0	43.9	+ 31 27		15.5		
0	44.1	+ 27 40		15.4		
0	44.1	+ 29 32		15.7		diffuse
0	44.2	+ 30 00		15.7		
0	44.2	+ 32 24		14.1		
0	44.4	+ 27 48		15.4		
0	44.4	+ 30 04		14.8		
0	44.4	+ 32 25		15.1		
0	44.8	+ 31 23		15.7		very diffuse



FIELD No. 501

$0^{\text{h}}57^{\text{m}} + 30^{\circ}30'$

Survey Plate No. 601

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	o	'	"	
965	0	46	12.0	+	32	39 08	7.70
1071	0	50	54.7	+	29	13 07	6.72
1148	0	55	07.4	+	28	43 20	5.64
1253	1	00	04.3	+	31	32 11	5.46
1431	1	08	20.9	+	31	09 33	5.04
1441	1	08	54.0	+	29	49 29	4.70

CLUSTERS OF GALAXIES

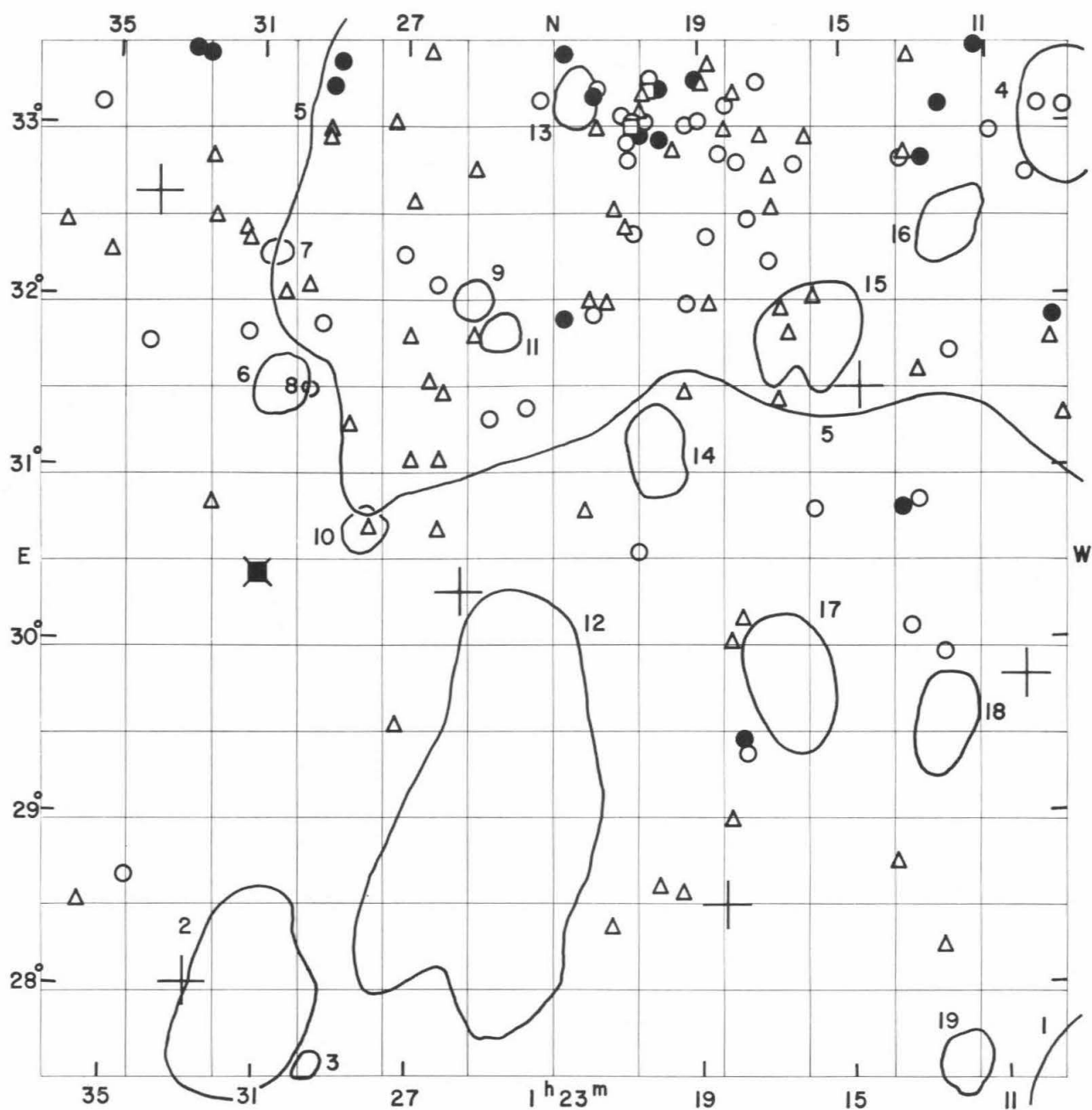
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0042.3 + 3125	compact	71	2.2	ED	12
0045.4 + 2934	compact	68	1.9	VD	11
0051.7 + 3322	medium compact	93	4.3	MD	3
0057.3 + 3107	compact	45	0.4	ED	10
0059.5 + 2908	open	109	5.1	D	9
0102.7 + 2733	compact	86	2.1	ED	2
0105.5 + 3020	compact	70	1.4	ED	8
0106.0 + 2908	compact	67	2.8	VD	7
0107.4 + 3156	medium compact	84	1.9	ED	6
0107.5 + 3212	medium compact	625	32.0	Near	5
0108.9 + 3300	medium compact	105	3.4	D	4
0109.4 + 2724	medium compact	84	3.4	VD	1

Average number of galaxies per cluster = 125.6

GALAXIES

Position α 1950 δ	NGC IC*	m _p	V _s km/sec	Remarks
h m o				
0 43.3 + 29 41	243	14.6		
0 43.7 + 29 21		15.7		diffuse
0 43.7 + 29 58		14.5		
0 43.8 + 29 27		15.0		
0 43.8 + 31 32		15.3		
0 43.9 + 31 27		15.5		
0 44.1 + 27 40		15.4		
0 44.1 + 29 32		15.7		diffuse
0 44.2 + 30 00		15.7		
0 44.2 + 32 24		14.1		
0 44.4 + 27 48		15.4		
0 44.4 + 30 04		14.8		
0 44.4 + 32 25		15.1		
0 44.7 + 27 33	1584*	15.0		very diffuse
0 44.8 + 31 23		15.7		very diffuse
0 45.2 + 29 41		15.4		compact
0 45.4 + 29 41		15.6		compact
0 45.5 + 28 20		15.0		
0 45.6 + 27 43		15.6		
0 46.1 + 31 42	262	15.0		
0 46.3 + 27 57		15.2		
0 47.1 + 32 00	266	12.6		
0 47.4 + 31 28		15.6		
0 48.1 + 28 25		15.6		
0 48.1 + 29 53		15.2		
0 48.4 + 29 15		15.5		
0 48.9 + 29 08		14.5		
0 48.9 + 29 27		15.5		very diffuse
0 49.4 + 29 24		14.3		
0 50.0 + 30 22	282	14.7		
0 50.2 + 28 45		14.1		
0 50.7 + 29 00		14.8		
0 50.8 + 32 13	287	14.8		
0 50.9 + 31 09		15.5		
0 51.4 + 30 05		15.3		
0 51.7 + 31 24		14.8		

Position a 1950 δ				NGC IC*	m_p	V_s km/sec	Remarks
h	m	o	'				
0	52.0	+	28 30		15.3		
0	52.1	+	28 27		15.6		
0	52.1	+	28 35		14.9		
0	52.1	+	28 59		15.3		
0	52.1	+	31 05		14.9		
0	52.4	+	31 16	295	13.5		
0	52.6	+	30 13		15.7		
0	52.6	+	31 24	296	15.4		
0	52.6	+	31 27		15.7		extremely diffuse
0	52.6	+	31 28		14.9		
0	52.8	+	30 08		15.7		
0	53.4	+	30 48		15.6		
0	54.8	+	30 00	311	14.1		
0	55.0	+	32 17		15.7		diffuse
0	55.0	+	33 05		15.0		
0	55.1	+	30 05	315	12.5		
0	55.1	+	31 13		14.4		
0	55.3	+	30 09	318	15.2		
0	55.3	+	30 26		15.4		
0	56.8	+	31 31		15.0		
0	56.9	+	29 04		15.1		
0	57.1	+	31 33		14.8		compact nucleus
0	57.8	+	30 32	66*	15.0		
0	57.9	+	29 51		15.4		compact
0	57.9	+	30 24	338	14.0		
0	58.3	+	29 20		14.9		
0	58.4	+	29 52		14.8		
0	58.5	+	29 53		14.9		very compact
0	58.6	+	31 15		14.6		
0	58.7	+	30 47	69*	14.7		
0	59.1	+	29 53		15.0		
0	59.1	+	30 57		15.7		
0	59.4	+	32 09		15.5		
0	59.4	+	32 11		15.1		
1	00.7	+	31 58		15.0		
1	00.8	+	32 03		15.6		
1	02.0	+	32 42		15.6		compact
1	02.3	+	32 33		15.7		
1	02.5	+	31 25		15.7		diffuse
1	02.8	+	31 42		15.5		
1	02.8	+	32 10		15.7		
1	03.2	+	32 09	1618*	15.6		
1	03.4	+	31 08		15.5		diffuse
1	04.3	+	32 32	374	14.3		
1	04.5	+	32 13	380	13.9	+ 4341	
1	04.5	+	32 15	379	14.0	+ 5374	
1	04.6	+	32 48		15.0		
1	04.7	+	32 01	384	14.3	+ 4401	
1	04.7	+	32 03	385	14.3	+ 4845	
1	04.7	+	32 08	382	14.2	+ 5156	
1	04.7	+	32 09	383	13.6	+ 4888	
1	04.8	+	32 05	386	15.4	+ 5555	
1	04.8	+	32 40		15.1		
1	05.0	+	32 02	388	15.5	+ 5114	
1	05.2	+	33 02		15.4		
1	05.3	+	31 24		15.6		
1	05.3	+	33 11		14.7		
1	05.6	+	32 52	392	13.9		
1	05.7	+	32 53	394	14.8		



FIELD No. 502

$1^{\text{h}}23^{\text{m}} + 30^{\circ}30'$

Survey Plate No. 30

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	°	'	"	
1462	1	10	13.8	+	29	47 59	6.40
1544	1	14	37.1	+	31	28 53	6.86
1630	1	18	21.1	+	28	28 39	5.60
1773	1	25	30.7	+	30	18 00	6.87
1924	1	32	50.2	+	28	00 51	7.00
1950	1	33	57.3	+	32	35 56	8.0

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0107.5 + 3212	medium compact	625	32.0	Near	5
0108.9 + 3300	medium compact	105	3.4	D	4
0109.4 + 2724	medium compact	84	3.4	VD	1
0112.0 + 2732	open	82	1.8	ED	19
0112.1 + 3224	medium compact	61	2.0	VD	16
0112.4 + 2931	medium compact	74	2.4	ED	18
0115.9 + 3146	medium compact	84	3.3	VD	15
0116.6 + 2947	medium compact	81	3.5	VD	17
0120.2 + 3107	medium compact	80	2.2	VD	14
0122.4 + 3309	medium compact	80	1.6	ED	13
0124.5 + 3147	medium compact	75	1.2	ED	11
0124.6 + 2853	open	114	9.3	MD	12
0125.3 + 3159	compact	46	1.3	ED	9
0128.1 + 3038	open	59	1.4	ED	10
0129.5 + 2731	medium compact	40	0.9	ED	3
0129.7 + 3127	compact	35	0.5	ED	8
0130.5 + 3129	medium compact	86	1.8	ED	6
0130.6 + 3215	compact	46	0.9	ED	7
0131.2 + 2752	medium compact	105	5.3	MD	2

Average number of galaxies per cluster = 103.3

GALAXIES

Position α 1950 δ	NGC IC*	m _p	V _s km/sec	Remarks
h m o				
1 08.8 + 33 06	1636*	14.9		double nebula
1 09.1 + 31 18		15.7		
1 09.3 + 31 52	420	13.4		
1 09.4 + 31 45		15.3		
1 09.6 + 33 07	1638*	14.9		
1 09.9 + 32 43		14.7		
1 10.9 + 32 58	1648*	15.0		
1 11.3 + 33 27	431	14.0		
1 12.2 + 31 42	1652*	14.3		
1 12.3 + 33 07	1653*	13.9		
1 12.4 + 29 56	1654*	14.3		
1 12.6 + 28 13		15.2		
1 12.8 + 32 48	449=1656*	14.0		
1 13.0 + 31 35		15.4		
1 13.1 + 30 49	444=1658*	14.7		
1 13.2 + 33 24		15.5		
1 13.3 + 30 05	1659*	14.6		
1 13.3 + 32 50	1661*	15.2		
1 13.4 + 32 48	451	14.8		
1 13.5 + 30 46	452	14.0		
1 13.8 + 28 43		15.5		
1 15.8 + 32 00		15.6		
1 15.9 + 30 47		14.8		
1 16.0 + 32 55	1668*	15.7		
1 16.3 + 32 47		15.0		
1 16.6 + 31 47		15.7		
1 16.8 + 31 55		15.7		double system
1 16.9 + 31 24		15.6		
1 17.0 + 32 31	92*	15.1		

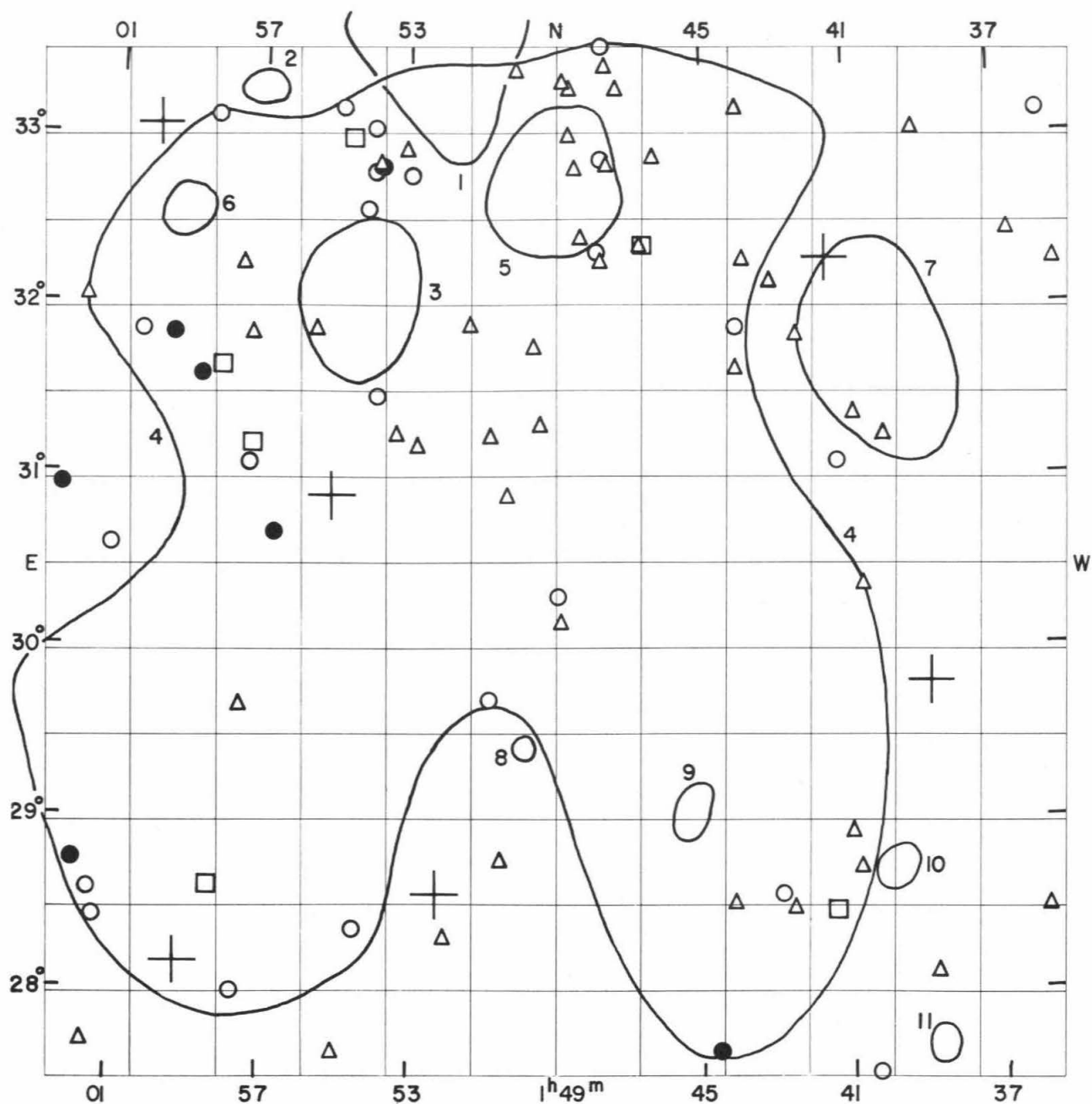
Position a 1950 δ			NGC IC*	m_p	V_s km/sec	Remarks
h	m	o				
1	17.1	+ 32 12	1666*	14.4		
1	17.1	+ 32 42		15.7		compact
1	17.3	+ 32 56	1669*	15.7		
1	17.4	+ 33 15		14.5		
1	17.7	+ 32 27	472	14.2		very compact
1	17.8	+ 29 22		14.7		
1	17.9	+ 29 26	1672*	14.0		
1	17.9	+ 30 08		15.5		
1	18.0	+ 32 48	1673*	14.6		compact
1	18.0	+ 33 10		15.2		star superposed
1	18.2	+ 28 59		15.7		
1	18.2	+ 30 00	1676*	15.7		very compact
1	18.3	+ 32 58	1677*	15.2		
1	18.3	+ 33 08		14.9		
1	18.4	+ 32 50		15.0		
1	18.7	+ 31 58		15.3		
1	18.8	+ 32 21		14.5		
1	18.8	+ 33 21		15.5		
1	18.9	+ 33 15	1679*	15.5		
1	19.0	+ 33 02	1680*	14.9		
1	19.1	+ 33 16	483	14.0		
1	19.3	+ 31 58		15.0		
1	19.4	+ 31 27		15.7		
1	19.4	+ 33 00	1682*	14.3		
1	19.5	+ 28 32		15.6		
1	19.7	+ 32 51		15.7		
1	20.1	+ 28 35		15.2		
1	20.1	+ 32 55	494	13.8		
1	20.1	+ 33 13	495	14.0	+ 4114	
1	20.4	+ 33 13	499=1686*	13.0	+ 4375	
1	20.4	+ 33 17	496	14.3		
1	20.5	+ 33 02	1687*	14.8		compact
1	20.6	+ 33 11	501	15.2		compact
1	20.7	+ 30 32		14.5		double system, bridge
1	20.7	+ 32 57	504	14.0		
1	20.7	+ 33 05	503	15.1		
1	20.8	+ 32 23		15.0		
1	20.8	+ 33 00	507	13.0	+ 4929	
1	20.8	+ 33 02	508	14.5		
1	21.0	+ 32 25		15.7		
1	21.0	+ 32 48	1689*	14.8		
1	21.0	+ 32 54	1690*	14.9		
1	21.2	+ 33 04		15.0		
1	21.3	+ 28 21		15.2		compact
1	21.3	+ 32 31		15.6		
1	21.5	+ 31 58		15.2		
1	21.8	+ 32 59	1692*	15.6		
1	21.8	+ 33 13	515	14.3		
1	21.9	+ 31 55		14.2		
1	21.9	+ 33 11	517	13.6		
1	22.0	+ 31 59		15.1		
1	22.1	+ 30 46		15.7		
1	22.7	+ 31 53		14.0		
1	22.7	+ 33 25	528	13.7		
1	23.4	+ 33 09		15.0		
1	23.7	+ 31 22		15.0		
1	24.8	+ 31 18		14.4		
1	25.2	+ 31 47		15.1		

Position a 1950 δ			NGC IC*	m_p	V_s km/sec	Remarks
h	m	o r				
1	25.2	+ 32 45		15.7		
1	26.0	+ 31 27		15.5		
1	26.1	+ 31 04		15.7		
1	26.2	+ 30 39		15.7		
1	26.2	+ 32 05	566	14.6		
1	26.3	+ 33 25		15.3		
1	26.4	+ 31 30		15.7		
1	26.8	+ 32 34		15.7		diffuse
1	26.9	+ 31 03		15.6		
1	26.9	+ 31 46		15.6		
1	27.1	+ 32 15	571	15.0		
1	27.3	+ 29 32		15.6		
1	27.4	+ 33 01		15.7		
1	28.0	+ 30 40		15.7		
1	28.6	+ 31 15		15.6		
1	28.9	+ 33 22	579	13.6		
1	29.1	+ 32 58		15.4		
1	29.1	+ 33 14	582	13.7		
1	29.2	+ 32 55		15.1		
1	29.3	+ 31 51		15.0		interacting double system
1	29.7	+ 32 03		15.7		
1	30.3	+ 32 00		15.7		
1	31.0	+ 30 24	598	6.5	- 186	$m_H = 7.8$ Sc *)
1	31.4	+ 31 48		14.9		
1	31.4	+ 32 20		15.7		
1	31.5	+ 32 24		15.4		
1	32.3	+ 30 47		15.5		
1	32.3	+ 32 27		15.5		
1	32.4	+ 32 48		15.2		
1	32.6	+ 33 25	608	14.0		
1	33.0	+ 33 26	614	13.9		
1	34.1	+ 31 44		14.6		
1	34.4	+ 28 38		14.4		
1	35.2	+ 32 15		15.7		diffuse
1	35.6	+ 33 07	1718*	15.0		
1	35.7	+ 28 29		15.7		
1	36.4	+ 32 25		15.7		

*) NGC 588, 592, 595, 604, and IC 131, 132, 133, 134, 135, 136, 137, 139, 140, 142, and 143, all refer to various parts of NGC 598.

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
495	-	-	-	-	14.2	S0	-	-
499	-	-	-	-	13.2	S0	-	-
507	-	-	-	-	12.8	E3	-	-
598	-	-	-	-	-	Sc	6.19	Sc+



FIELD No. 503

$l^{h49m} + 30^{\circ}30'$

Survey Plate No. 413

GC STARS

Nos.	R.A.			Decl.	m_p
	h	m	s		
2054	1	38	49.2	+ 29 47 42	6.02
2117	1	41	30.4	+ 32 15 58	6.78
2314	1	52	16.2	+ 28 33 13	7.27
2368	1	55	10.7	+ 30 53 31	7.21
2450	1	59	15.7	+ 28 09 34	6.73
2458	2	00	02.2	+ 33 02 38	5.44

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0138.6 + 2740	compact	67	1.0	ED	11
0139.7 + 2843	compact	68	1.4	VD	10
0140.1 + 3144	medium compact	144	5.5	Near	7
0145.2 + 2902	open	71	1.4	ED	9
0149.0 + 3240	medium compact	163	4.5	MD	5
0149.8 + 2925	compact	55	0.7	ED	8
0150.9 + 3050	medium compact	570	27.8	Near	4
0152.0 + 3337	medium compact	144	6.3	D	1
0154.3 + 3201	compact	142	4.4	MD	3
0157.0 + 3315	medium compact	55	1.2	VD	2
0159.1 + 3232	medium compact	84	1.6	D	6

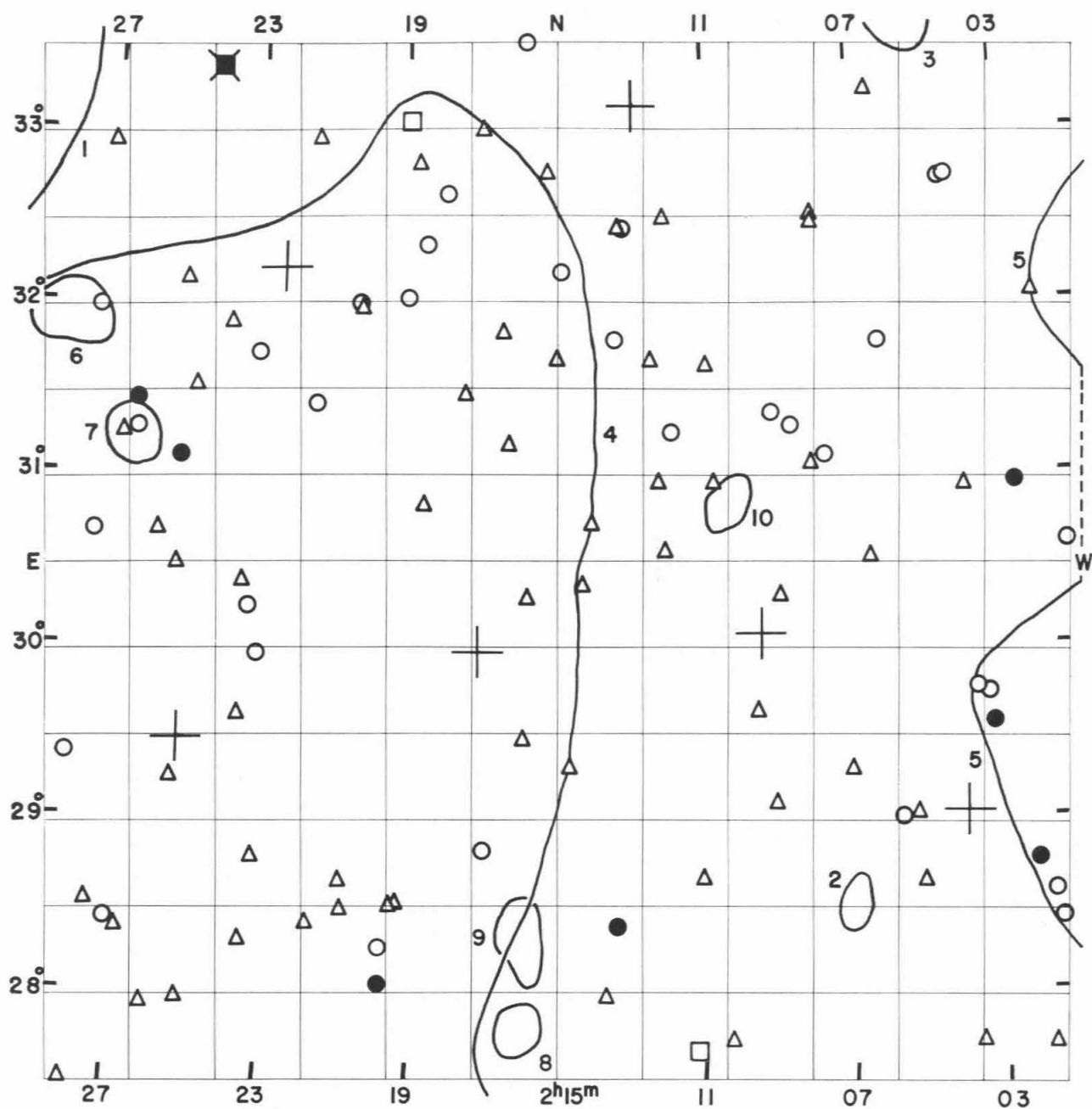
Average number of galaxies per cluster = 142.1

GALAXIES

Position α 1950 δ			NGC IC*	m _p	V _s km/sec	Remarks
h	m	o				
1	35.2	+ 32 15	1718*	15.7		diffuse
1	35.6	+ 33 07		15.0		
1	35.7	+ 28 29		15.7		
1	36.4	+ 32 25		15.7		
1	38.8	+ 28 05		15.7		diffuse
1	39.1	+ 33 00	661	15.7		diffuse
1	40.0	+ 31 14		15.6		
1	40.3	+ 27 30		14.8		
1	40.7	+ 30 21		15.5		
1	40.8	+ 28 42		15.4		
1	40.9	+ 31 21		15.6		compact
1	41.0	+ 28 55		15.3		
1	41.3	+ 31 05		14.9		
1	41.4	+ 28 28		13.0		
1	42.4	+ 31 49		15.6		
1	42.5	+ 28 29		15.1		
1	42.9	+ 28 34		14.7		
1	43.1	+ 32 08		15.6		
1	43.8	+ 32 15		15.7		
1	44.0	+ 31 37		15.7		compact
1	44.0	+ 33 09	670	15.2		
1	44.1	+ 28 30		15.2		
1	44.1	+ 31 51		14.8		
1	44.6	+ 27 38		13.1		m _H = 13.0
1	46.3	+ 32 50		15.6		compact
1	46.7	+ 32 20	1733*	13.0		
1	46.8	+ 32 20		15.6		compact
1	47.4	+ 33 15		15.6		
1	47.7	+ 32 48		15.4		compact
1	47.7	+ 33 23		15.3		
1	47.8	+ 32 15		15.7		
1	47.8	+ 32 50		14.7		compact
1	47.8	+ 33 30		15.0		
1	47.9	+ 32 18		15.0		
1	48.3	+ 32 23		15.5		
1	48.5	+ 32 47		15.4		compact
1	48.7	+ 32 58		15.3		

Position			NGC IC*	m_p	V_s km/sec	Remarks
α	1950	δ				
h	m	o				
1	48.7	+ 33 15		15.5		
1	48.9	+ 30 08		15.2		
1	48.9	+ 33 17		15.7		compact
1	49.0	+ 31 18		14.9		
1	49.4	+ 31 17		15.1		
1	49.6	+ 31 45		15.6		diffuse
1	50.1	+ 33 21		15.7		
1	50.3	+ 30 52		15.7		
1	50.5	+ 28 45		15.6		
1	50.8	+ 29 41		14.2		
1	50.8	+ 31 14		15.3		
1	51.3	+ 31 52		15.1		
1	52.0	+ 28 18		15.7		star superposed
1	52.8	+ 31 10		15.7		
1	53.0	+ 32 45		15.0		
1	53.1	+ 32 53		15.7		
1	53.3	+ 31 15		15.7		
1	53.8	+ 32 48	736	13.6	+ 4366	
1	53.9	+ 31 27		14.9		
1	53.9	+ 32 49	738	15.5		very compact
1	54.0	+ 32 46	740	14.9		
1	54.0	+ 33 01		14.8		
1	54.2	+ 32 33		14.3		
1	54.4	+ 28 20	1753*	15.0		compact
1	54.6	+ 32 58	750+751	12.9	+ 5128	$m_H = 12.9$ E, double system, very compact bridge *)
1	54.9	+ 27 37		15.2		
1	54.9	+ 33 08	761	14.5		
1	55.6	+ 31 50		15.6		
1	56.7	+ 30 40	769	13.4		
1	57.3	+ 31 10	777	12.7		$m_H = 13.0$
1	57.3	+ 31 48		15.4		
1	57.4	+ 31 03	778	14.2		
1	57.6	+ 29 39		15.5		
1	57.6	+ 32 13		15.7		diffuse
1	57.7	+ 27 59	780	14.6		
1	58.2	+ 31 38	783=1765*	12.8		
1	58.4	+ 28 35	784	12.1		
1	58.4	+ 33 05		14.4		
1	58.8	+ 31 35	785=1766*	13.9		
1	59.5	+ 31 50	789	14.0		
2	00.4	+ 31 50	798	14.7		
2	01.1	+ 30 35	804=1773*	14.7		
2	01.4	+ 28 25		14.7		
2	01.6	+ 27 41		15.4		
2	01.6	+ 28 34	805	14.7		
2	01.9	+ 32 02		15.5		diffuse
2	02.0	+ 28 45	807	13.8		
2	02.5	+ 30 56		14.0		

*) NGC 750; $m_p = 13.5$ $V_s = + 5130$. NGC 751; $m_p = 13.9$ $V_s = + 5126$.



FIELD No. 504

$2^{\text{h}} 15^{\text{m}} + 30^{\circ} 30'$

Survey Plate No. 1248

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	o	'	"	
2532	2	03	56.0	+	29	01 55	6.53
2633	2	09	27.8	+	30	04 11	5.43
2710	2	12	58.3	+	33	07 39	5.26
2798	2	17	08.6	+	29	57 35	6.60
2911	2	22	29.3	+	32	10 57	7.50
2956	2	25	13.7	+	29	26 50	5.38

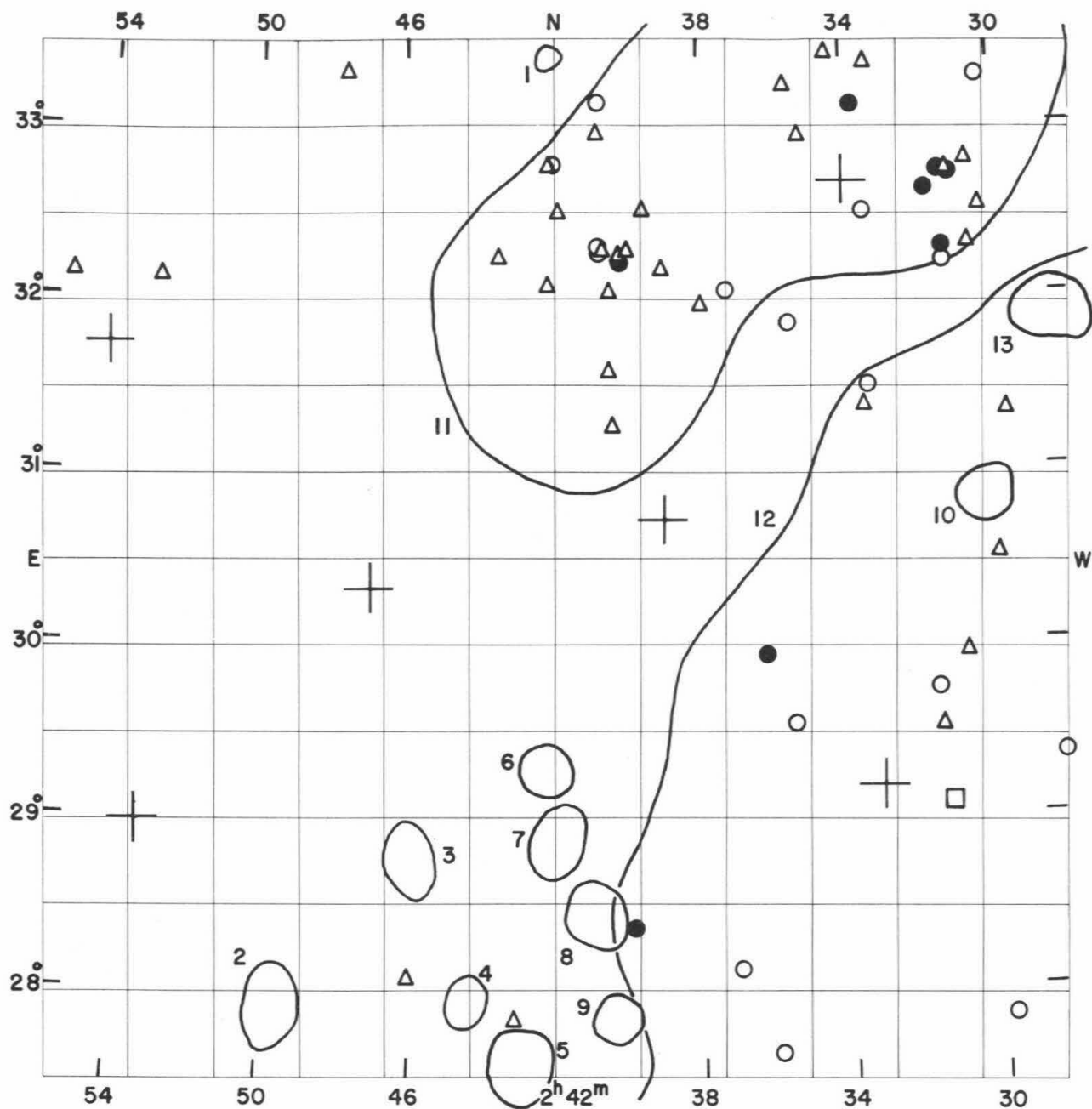
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0150.9 + 3050	medium compact	570	27.8	Near	5
0205.5 + 3342	medium compact	69	2.5	VD	3
0207.0 + 2830	compact	65	1.3	ED	2
0210.3 + 3049	medium compact	70	1.5	ED	10
0215.9 + 2819	medium compact	93	1.9	ED	9
0216.0 + 2746	compact	85	1.6	ED	8
0226.0 + 2600	open	1184	50.0	Near	4
0226.5 + 3111	compact	61	1.8	ED	7
0228.3 + 3153	open	71	2.2	VD	6
0236.2 + 3249	medium compact	211	18.0	Near	1

Average number of galaxies per cluster = 247.9

GALAXIES

Position α 1950 δ			NGC IC*	m _p	V _s km/sec	Remarks
h	m	o				
2	01.1	+ 30 35	804≡1773*	14.7		
2	01.4	+ 28 25		14.7		
2	01.6	+ 27 41		15.4		
2	01.6	+ 28 34	805	14.7		
2	01.9	+ 32 02		15.5		
2	02.0	+ 28 45	807	13.8		
2	02.5	+ 30 56		14.0		
2	03.2	+ 29 33		14.0		
2	03.3	+ 29 44		14.5		
2	03.6	+ 27 42		15.7		
2	03.6	+ 29 45		14.8		
2	03.9	+ 30 55	200*	15.2		
2	04.2	+ 32 44		14.9		
2	04.4	+ 32 44		14.8		
2	05.1	+ 28 38		15.6		
2	05.2	+ 29 01	816	15.3		
2	05.7	+ 29 00	819	14.1		
2	06.2	+ 31 46		14.7		
2	06.4	+ 30 30	826	15.4		
2	06.5	+ 33 15		15.7		
2	07.0	+ 29 17		15.5		
2	07.7	+ 31 06		15.0		compact
2	08.0	+ 31 03		15.1		
2	08.0	+ 32 28		15.5		
2	08.0	+ 32 30		15.6		
2	08.6	+ 31 17		14.7		
2	08.9	+ 30 17		15.7		
2	09.1	+ 29 05		15.7		
2	09.2	+ 31 21		15.0		
2	09.6	+ 29 37		15.6		
2	10.3	+ 27 44		15.7		compact
2	10.7	+ 30 58		15.7		
2	11.0	+ 28 39		15.6		
2	11.0	+ 31 38		15.4		
2	11.2	+ 27 39	855	13.0		
2	11.9	+ 31 15		14.6		
2	12.1	+ 30 33	860	15.1		
2	12.1	+ 32 30		15.6		



FIELD No. 505

$2^{\text{h}}42^{\text{m}} + 30^{\circ}30'$

Survey Plate No. 1301

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	°	'	"	
3113	2	33	07.0	+	29	11 11	7.10
3139	2	34	05.4	+	32	40 28	6.29
3244	2	39	00.9	+	30	43 25	7.21
3388	2	47	00.2	+	30	19 14	6.74
3522	2	53	16.4	+	28	57 48	6.52
3544	2	54	14.7	+	31	44 03	5.18

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0226.0 + 2600	open	1184	50.0	Near	12
0228.3 + 3153	open	71	2.2	VD	13
0230.2 + 3050	medium compact	80	1.7	VD	10
0236.2 + 3249	medium compact	211	18.0	Near	11
0240.2 + 2750	compact	91	1.5	ED	9
0240.8 + 2825	medium compact	56	2.0	ED	8
0241.9 + 2852	medium compact	92	2.0	ED	7
0242.2 + 3323	compact	45	0.8	ED	1
0242.8 + 2916	medium compact	56	1.6	ED	6
0242.9 + 2734	compact	152	2.1	ED	5
0244.4 + 2755	medium compact	48	1.5	ED	4
0245.9 + 2845	compact	71	2.0	ED	3
0249.6 + 2753	medium compact	74	2.1	ED	2

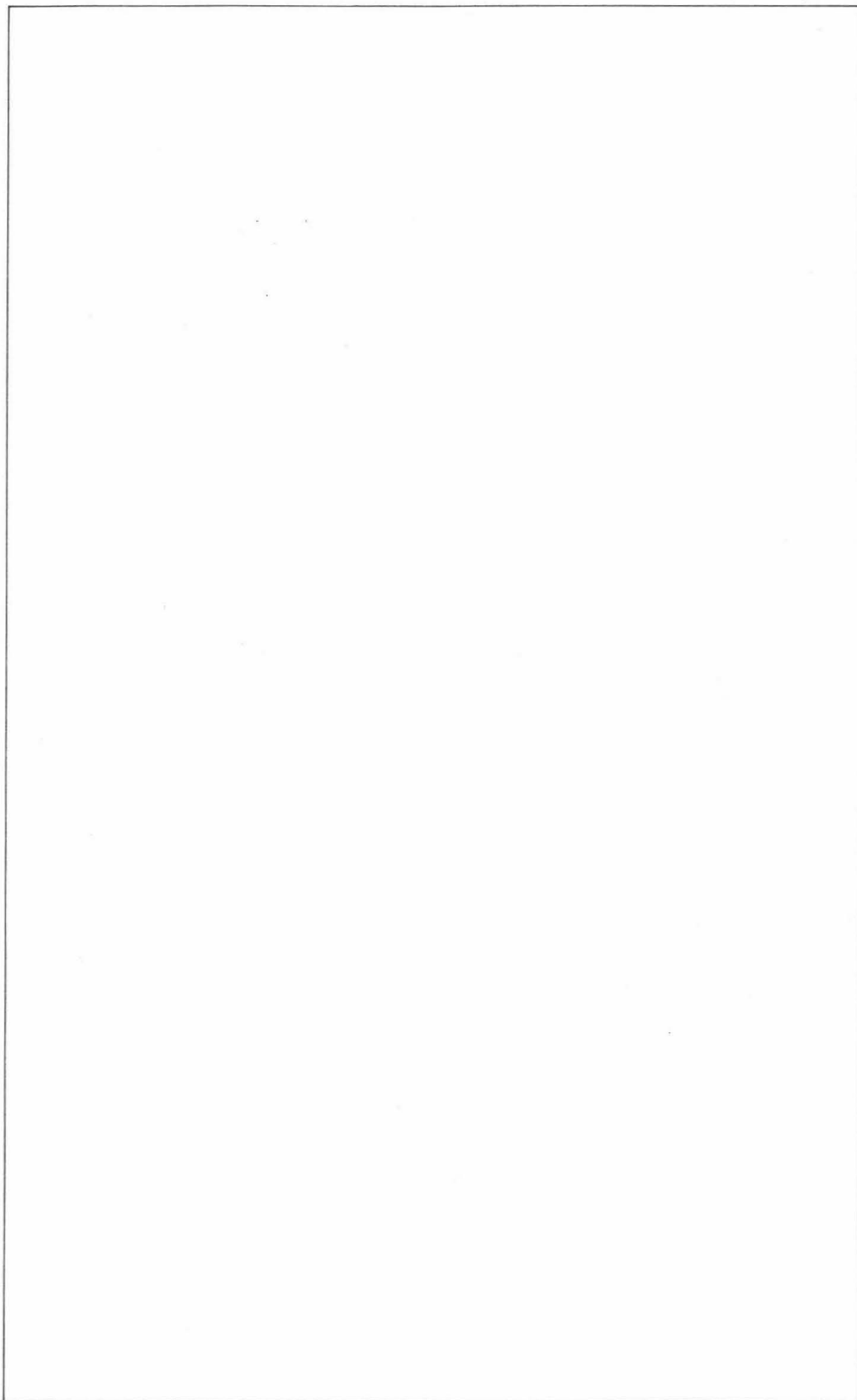
Average number of galaxies per cluster = 171.6

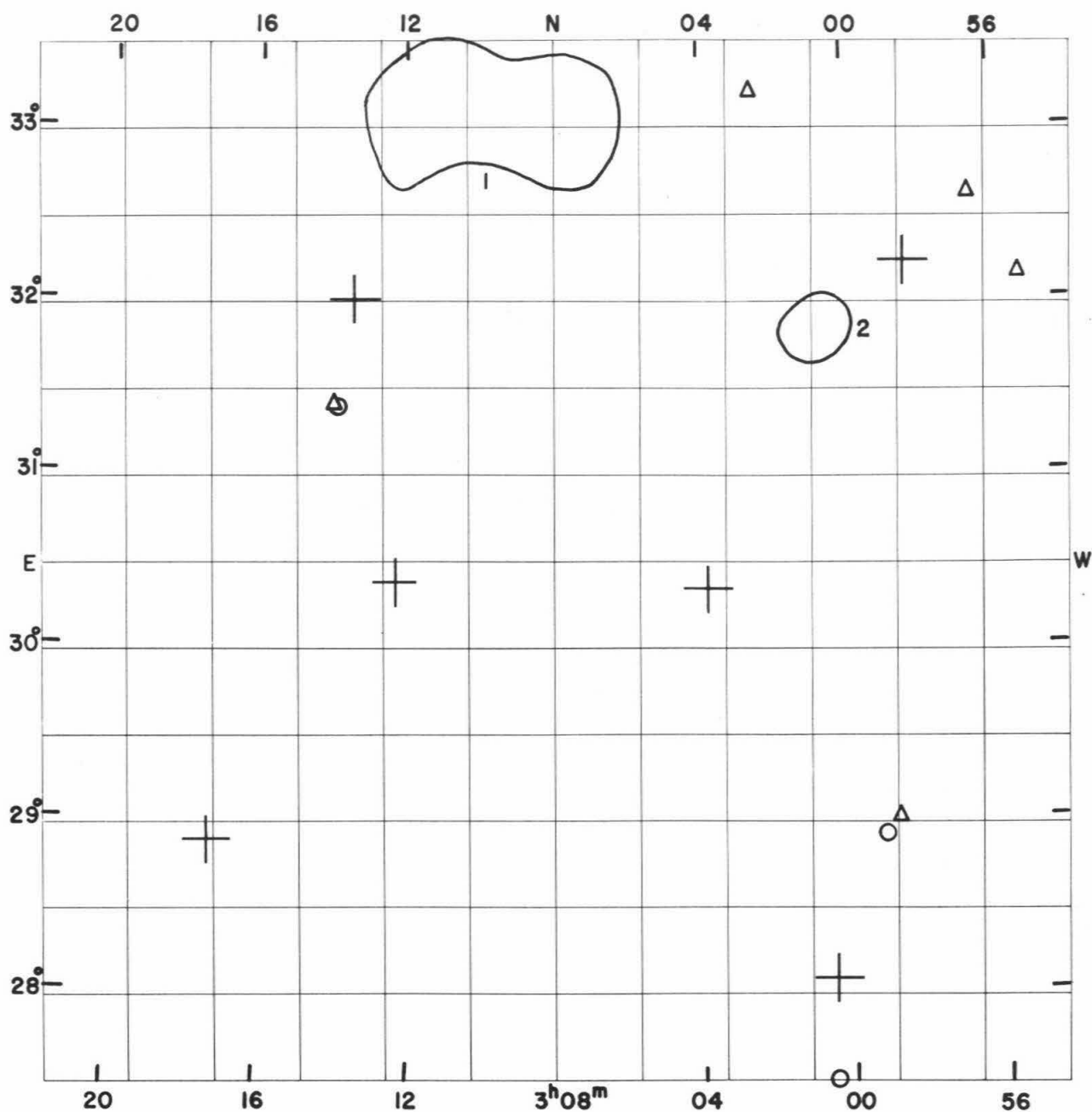
GALAXIES

Position α 1950 δ h m s			NGC IC*	m_p	V_s km/sec	Remarks
2 28.2	+	29 22	953	14.5		
2 29.6	+	31 20		15.6		
2 29.8	+	27 51	962	14.2		compact
2 29.9	+	30 31		15.7		
2 30.3	+	32 32		15.2		very compact
2 30.3	+	33 17		14.9		very diffuse
2 30.6	+	32 19		15.7		
2 30.6	+	32 48		15.2		
2 30.8	+	29 58		15.7		
2 31.1	+	32 44	969	13.5		
2 31.2	+	32 46	970	15.7		double nebula
2 31.3	+	29 05	972	12.1	+ 1555	$m_H = 12.6$ Sp
2 31.3	+	32 13	1815*	14.3		
2 31.3	+	32 17	973	13.7		
2 31.4	+	32 45	974	13.9		
2 31.5	+	29 32		15.7		extremely diffuse
2 31.6	+	29 45		15.0		double system
2 31.8	+	32 38	978	13.3		double system
2 33.4	+	31 30		14.6		
2 33.4	+	32 30		15.0		
2 33.4	+	33 22		15.7		compact
2 33.5	+	31 23		15.1		
2 33.8	+	33 06	987	13.4		
2 34.4	+	33 25		15.6		very diffuse
2 35.2	+	32 56		15.7		
2 35.5	+	29 32		14.7		
2 35.6	+	31 51	1823*	14.8		
2 35.7	+	33 14		15.6		diffuse
2 36.0	+	27 37		14.4		
2 36.3	+	29 56	1012	13.1		
2 37.0	+	28 06		14.8		
2 37.3	+	32 02		14.5		
2 38.0	+	31 58		15.7		
2 39.1	+	32 09		15.2		extremely diffuse
2 39.6	+	32 31		15.7		

Position				NGC IC*	m_p	V_s km/sec	Remarks
α	1950	δ					
h	m	o	i				
2	39.9	+	28 21	1056	13.5		
2	40.0	+	32 17	1057	15.7		
2	40.2	+	32 12	1060	13.4		
2	40.2	+	32 15	1061	15.2		
2	40.4	+	31 15		15.6		very diffuse
2	40.5	+	31 35		15.7		
2	40.5	+	32 02		15.6		very compact
2	40.7	+	32 17		15.7		very diffuse
2	40.8	+	32 15	1066	14.9		compact
2	40.8	+	32 18	1067	14.6		
2	40.8	+	32 57		15.3		
2	40.8	+	33 08		15.0		
2	41.9	+	32 30		15.4		very compact
2	42.1	+	32 47		14.9		
2	42.2	+	32 04		15.5		
2	42.2	+	32 46		15.2		
2	43.1	+	27 49		15.6		
2	43.6	+	32 14		15.6		
2	46.0	+	28 04		15.7		
2	47.7	+	33 18		15.7		
2	52.8	+	32 08		15.5		
2	55.3	+	32 08		15.5		

MAGNITUDES AND TYPES FROM OTHER SOURCES							
NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958
972	-	-	12.33	Sb	12.1	Sb	- -





FIELD No. 506
 $3^{\text{h}}08^{\text{m}} + 30^{\circ}30'$

Survey Plate No. 847

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	°	'	"	
3622	2	58	25.4	+	32	12 58	6.9
3656	3	00	30.7	+	28	04 30	6.34
3716	3	03	49.6	+	30	20 08	7.11
3879	3	12	17.4	+	30	22 19	5.53
3904	3	13	29.9	+	32	00 05	6.05
3981	3	17	18.5	+	28	52 07	4.72

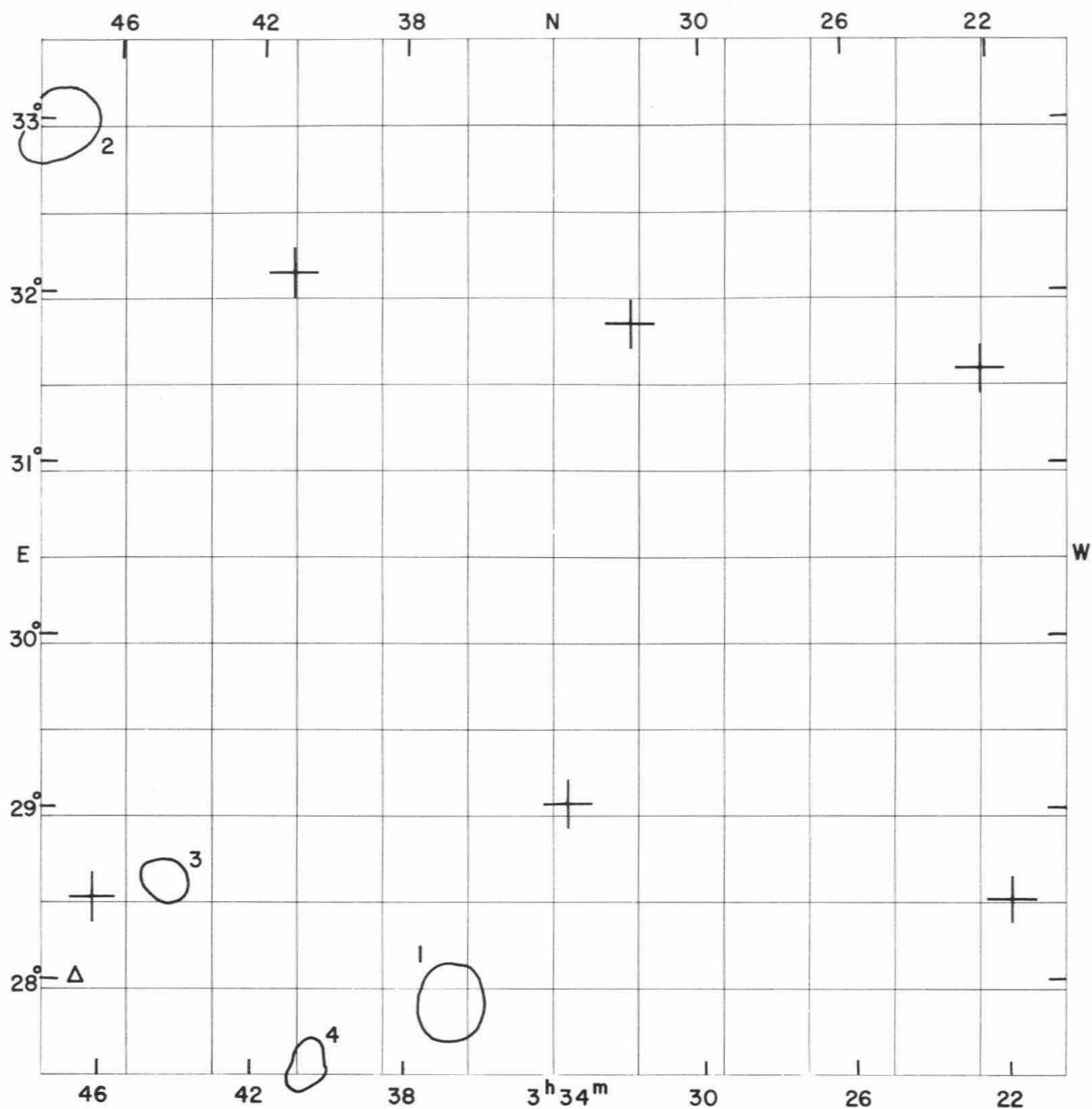
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0300.9 + 3150	medium compact	110	2.1	VD	2
0309.8 + 3305	medium compact	154	6.0	D	1

Average number of galaxies per cluster = 132.0

GALAXIES

Position			NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ				
h	m	o				
2	55.3	+ 32 08		15.5		
2	56.6	+ 32 36		15.7		double nebula
2	58.8	+ 29 00		15.7		compact
2	59.2	+ 28 55		14.8		
3	00.5	+ 27 30		15.0		compact
3	02.6	+ 33 12		15.6		
3	13.9	+ 31 23		14.9		
3	14.0	+ 31 24		15.6		



FIELD No. 507

$3^{\text{h}}34^{\text{m}} + 30^{\circ}30'$

Survey Plate No. 1457

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	°	'	"	
4062	3	21	47.0	+	28	28 39	6.99
4072	3	22	18.2	+	31	33 21	7.49
4264	3	31	53.9	+	31	51 04	6.62
4297	3	33	35.9	+	29	03 34	6.63
4461	3	41	10.6	+	32	07 53	3.94
4590	3	46	21.0	+	28	29 14	8.9

CLUSTERS OF GALAXIES

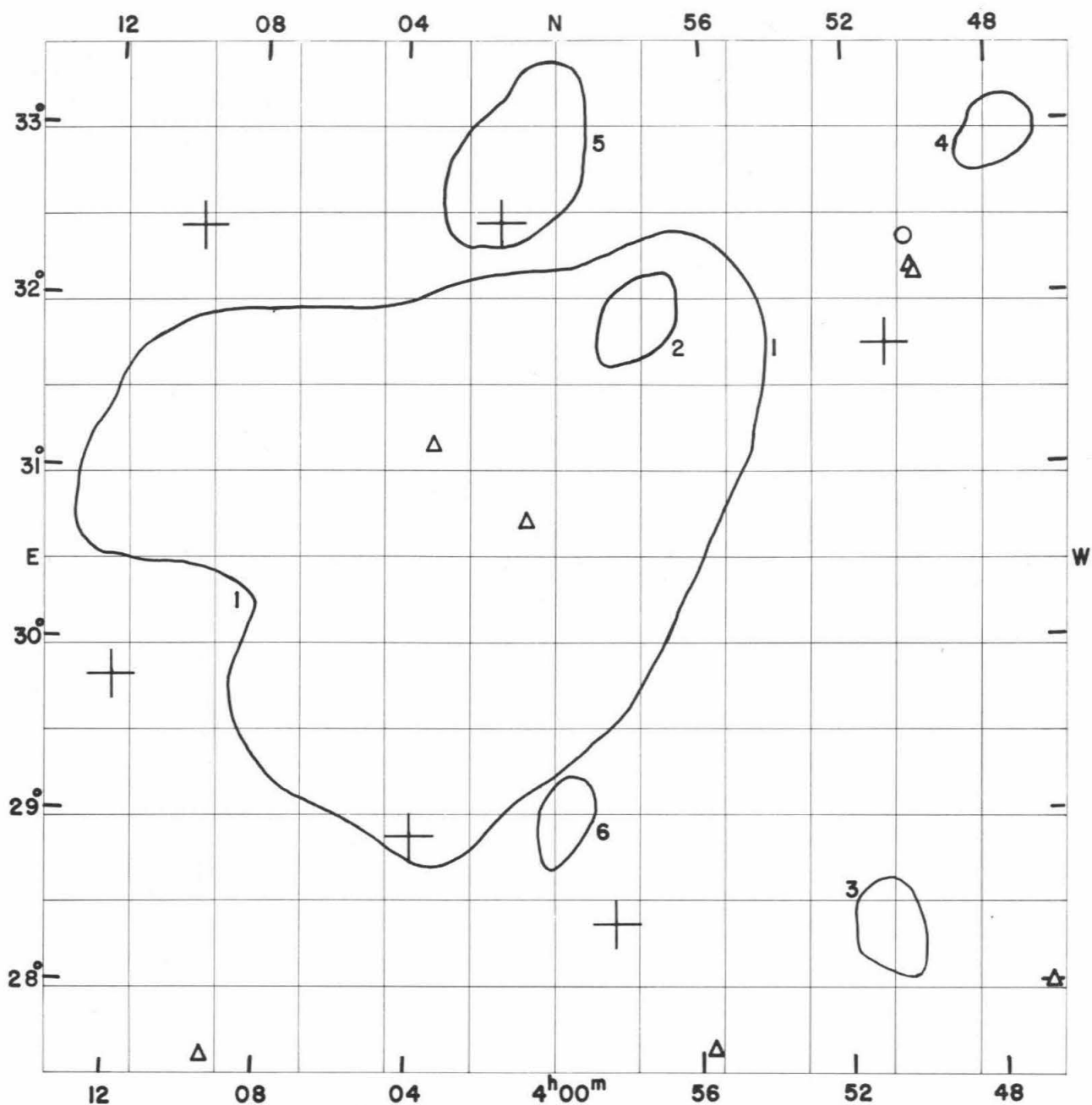
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0336.7 + 2754	compact	69	2.2	VD	1
0340.4 + 2732	compact	61	1.3	ED	4
0344.3 + 2836	medium compact	55	1.4	VD	3
0347.8 + 3258	open	59	2.2	D	2 *)

Average number of galaxies per cluster = 61.0

*) Cluster No. 2 is heavily obscured.

GALAXIES

Position		NGC IC*	m _p	V _s km/sec	Remarks
α	1950 δ				
h	m				
3	46.7 + 28 00		15.6		



FIELD No. 508

$4^{\text{h}}00^{\text{m}} + 30^{\circ}30'$

Survey Plate No. 1468

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	°	'	"	
4688	3	50	59.0	+	31	44 12	2.91
4814	3	58	20.8	+	28	21 48	6.99
4891	4	01	32.2	+	32	26 07	6.70
4944	4	03	54.7	+	28	52 04	5.29
5064	4	09	46.9	+	32	24 21	6.88
5115	4	12	01.8	+	29	46 47	7.26

CLUSTERS OF GALAXIES

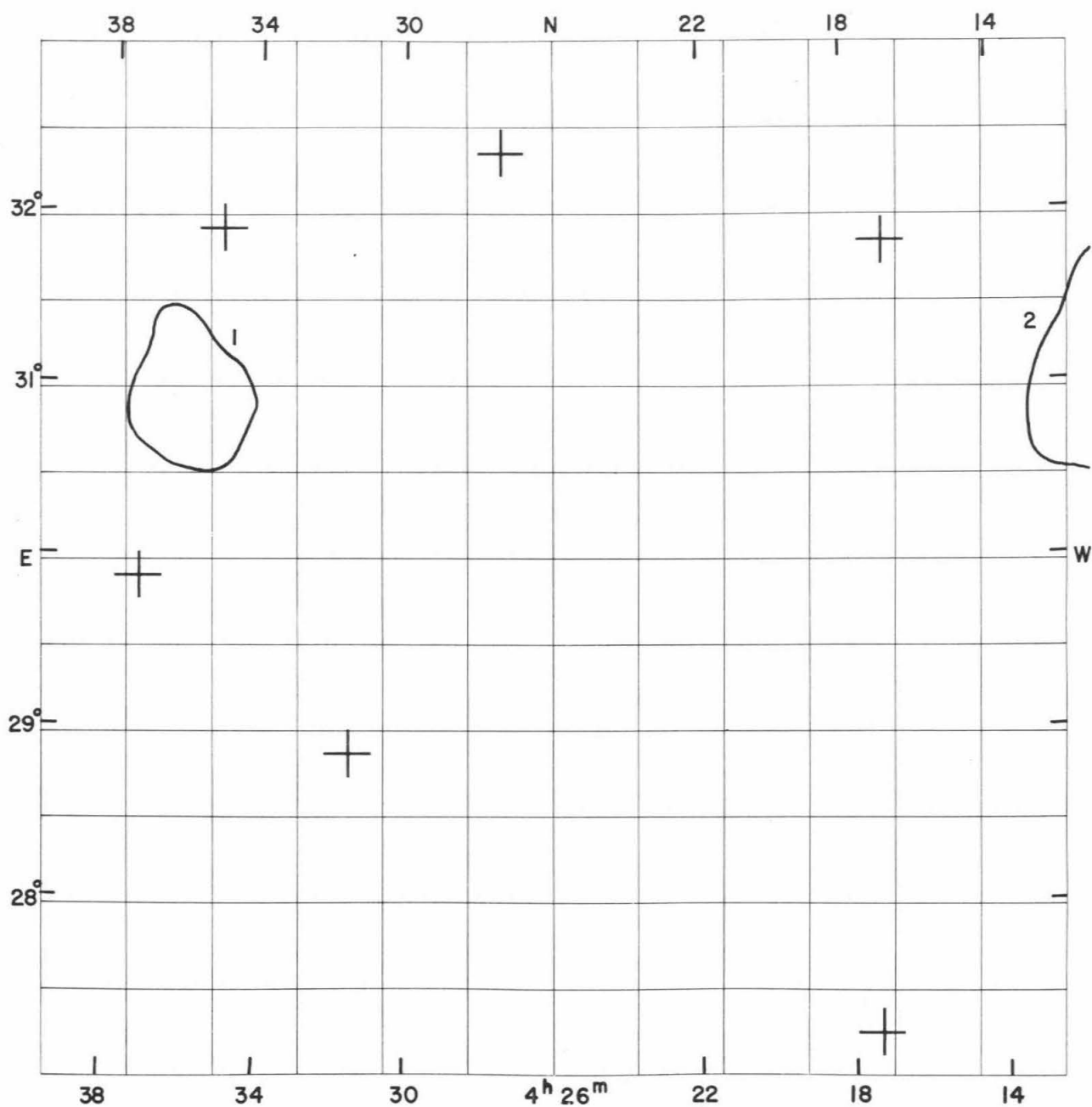
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0347.8 + 3258	open	59	2.2	D	4 *)
0351.0 + 2820	medium compact	67	2.6	D	3
0357.8 + 3154	medium compact	79	2.6	MD	2
0359.8 + 2859	medium compact	55	2.2	VD	6
0401.1 + 3247	medium compact	92	4.8	D	5
0403.1 + 3040	open	175	18.4	Near	1

Average number of galaxies per cluster = 87.8

*) Cluster No. 4 is heavily obscured.

GALAXIES

Position			NGC IC*	m _p	V _s km/sec	Remarks
α 1950	δ					
h m	o					
3 46.7	+ 28 00			15.6		
3 50.1	+ 32 09			15.7		
3 50.2	+ 32 10			15.2		
3 50.4	+ 32 20	1465		14.9		
3 55.7	+ 27 37			15.6		
4 00.8	+ 30 42			15.1		compact
4 03.3	+ 31 09			15.7		
4 09.4	+ 27 35	359*		15.4		



FIELD No. 509
 $4^h 26^m + 30^{\circ}00'$

Survey Plate No. 1454

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	o	i	"	
5227	4	16	58.7	+	31	50 03	6.35
5240	4	17	16.5	+	27	13 58	5.06
5472	4	27	25.5	+	32	21 02	6.19
5571	4	31	30.0	+	28	51 30	5.70
5633	4	35	02.6	+	31	53 59	7.08
5681	4	37	12.6	+	29	52 34	6.92

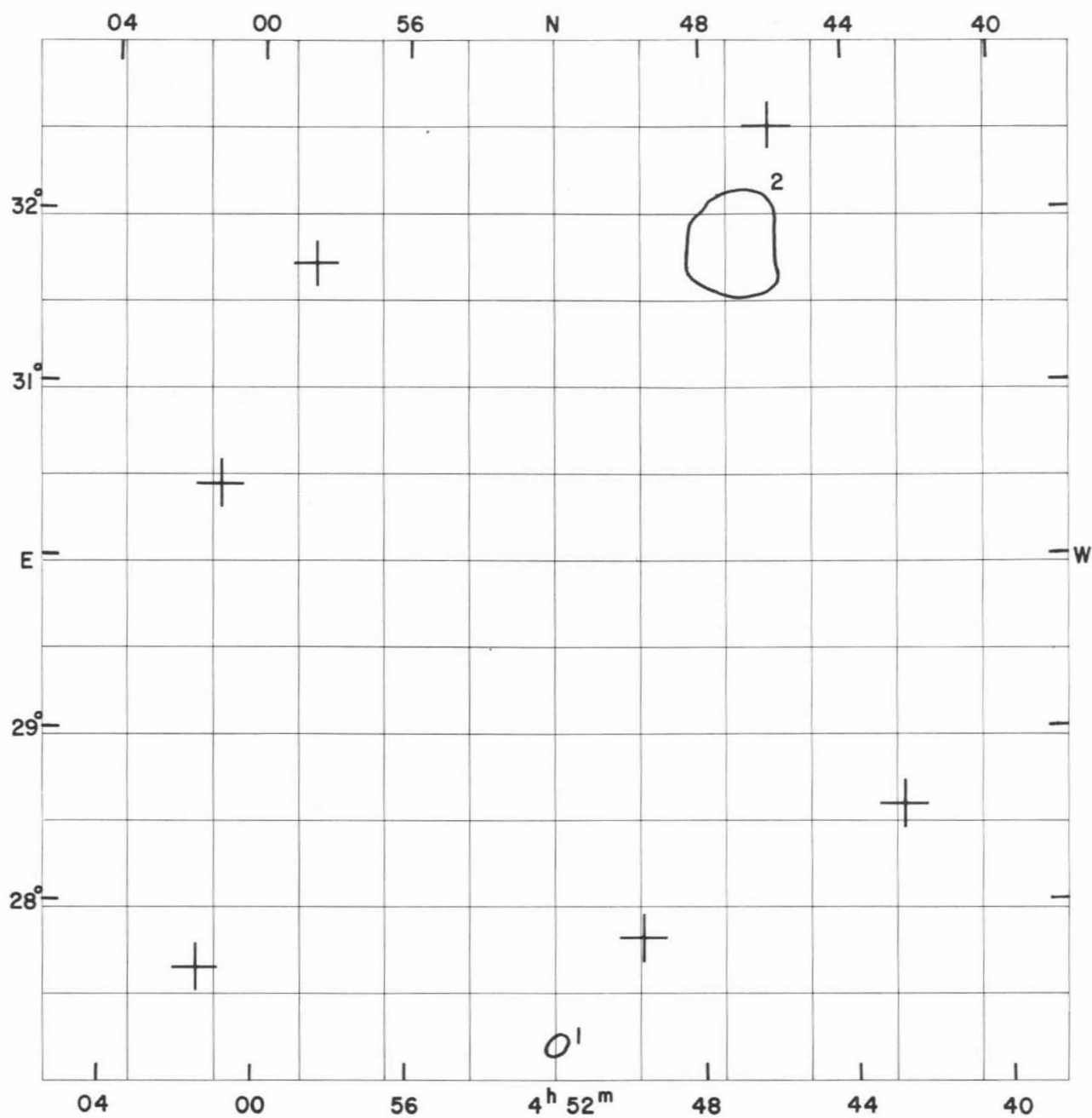
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0403.1 + 3040	open	175	18.4	Near	2
0435.9 + 3053	medium compact	98	4.3	Near	1

Average number of galaxies per cluster = 136.5

GALAXIES

No galaxies in this field



FIELD No. 510

$4^{\text{h}} 52^{\text{m}} + 30^{\circ} 00'$

Survey Plate No. 1314

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	o	i	"	
5792	4	42	41.9	+	28	34 15	7.02
5856	4	46	04.7	+	32	30 08	5.94
5940	4	49	39.5	+	27	48 56	5.91
6127	4	58	32.3	+	31	42 24	7.50
6176	5	01	02.7	+	30	25 33	6.39
6186	5	01	30.2	+	27	37 42	6.48

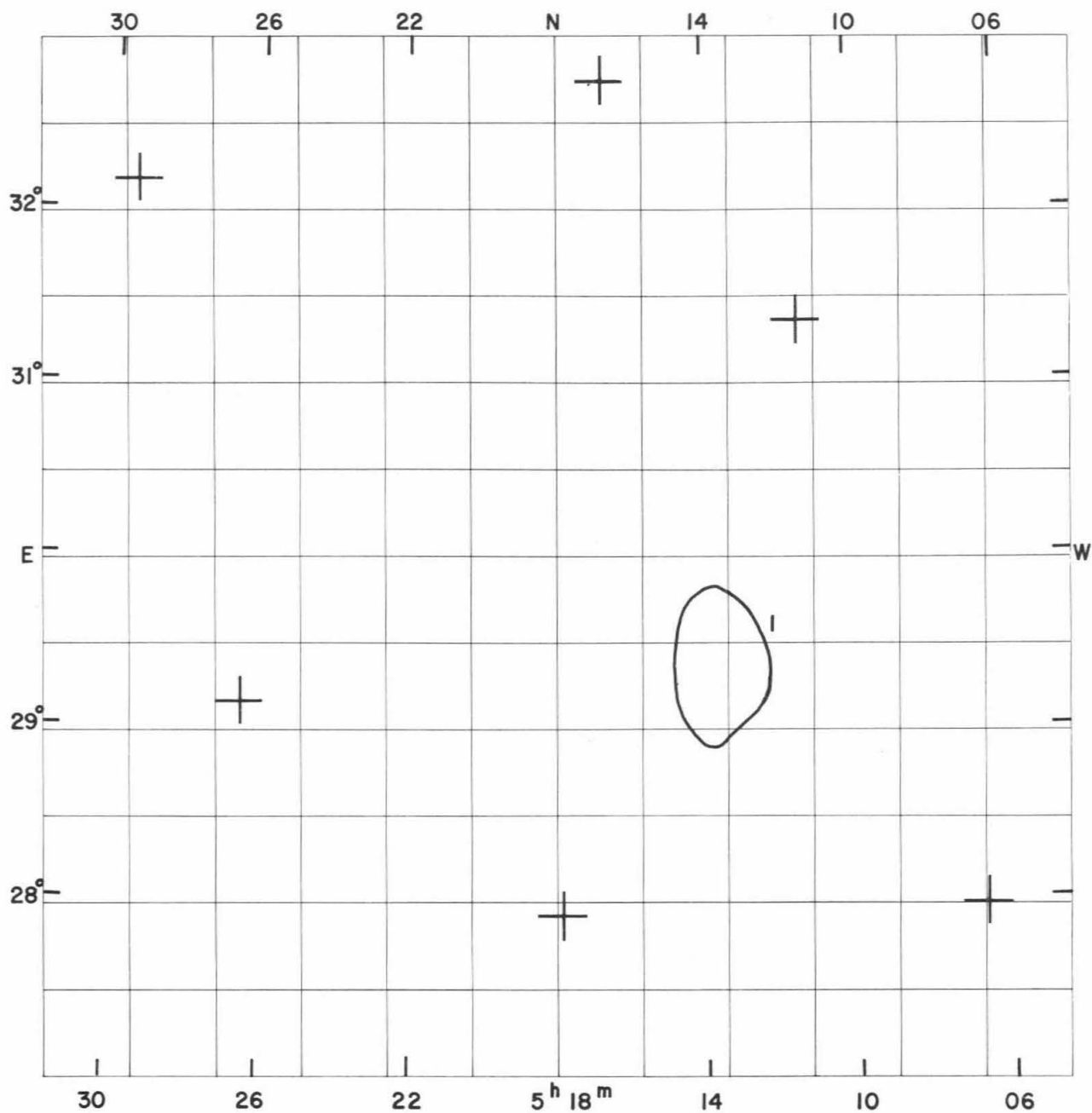
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0447.0 + 3149	medium compact	68	3.2	D	2
0451.9 + 2711	compact	57	0.6	VD	1

Average number of galaxies per cluster = 62.5

GALAXIES

No galaxies in this field



FIELD No. 511

5^h 18^m + 30° 00'

Survey Plate No. 1455

GC STARS

Nos.	R.A.			Decl.			m _p
	h	m	s	°	'	"	
6301	5	06	36.6	+	27	58 07	6.1
6396	5	11	25.8	+	31	20 44	6.78
6517	5	16	44.7	+	32	44 09	7.01
6543	5	17	50.8	+	27	54 31	6.30
6772	5	26	29.9	+	29	08 54	6.24
6849	5	29	28.3	+	32	09 25	4.88

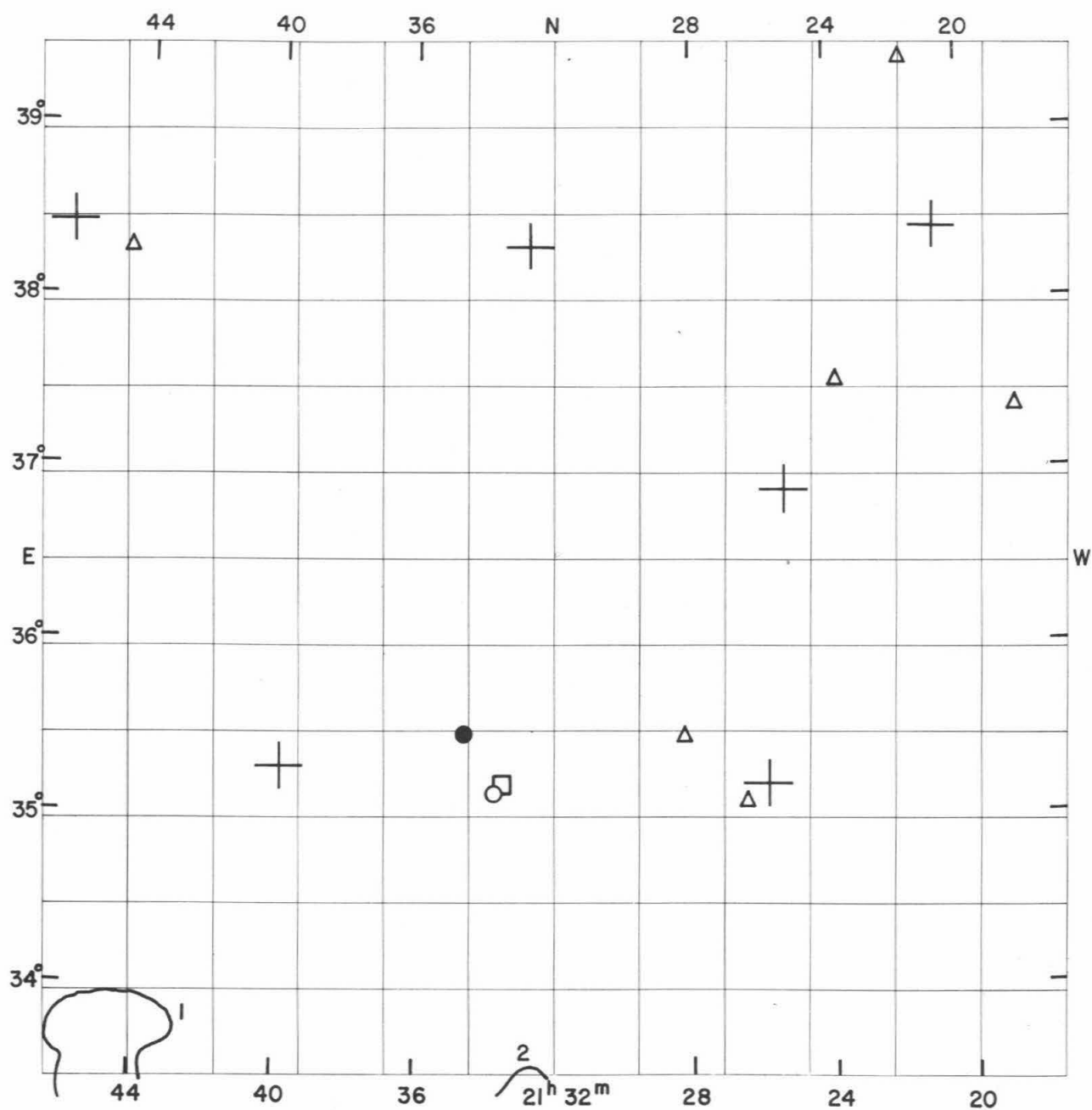
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0513.7 + 2922	compact	65	3.8	MD	1

Average number of galaxies per cluster = 65.0

GALAXIES

No galaxies in this field



FIELD No. 512
 $21^{\text{h}} 32^{\text{m}} + 36^{\circ} 30'$
 Survey Plate No. 269

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	o	r	"	
29939	21	20	47.0	+	38	25 12	6.45
30044	21	25	18.9	+	36	53 55	5.20
30058	21	25	49.1	+	35	11 26	7.02
30219	21	32	43.8	+	38	18 33	4.98
30384	21	39	54.4	+	35	16 53	6.38
30537	21	46	24.6	+	38	24 56	5.80

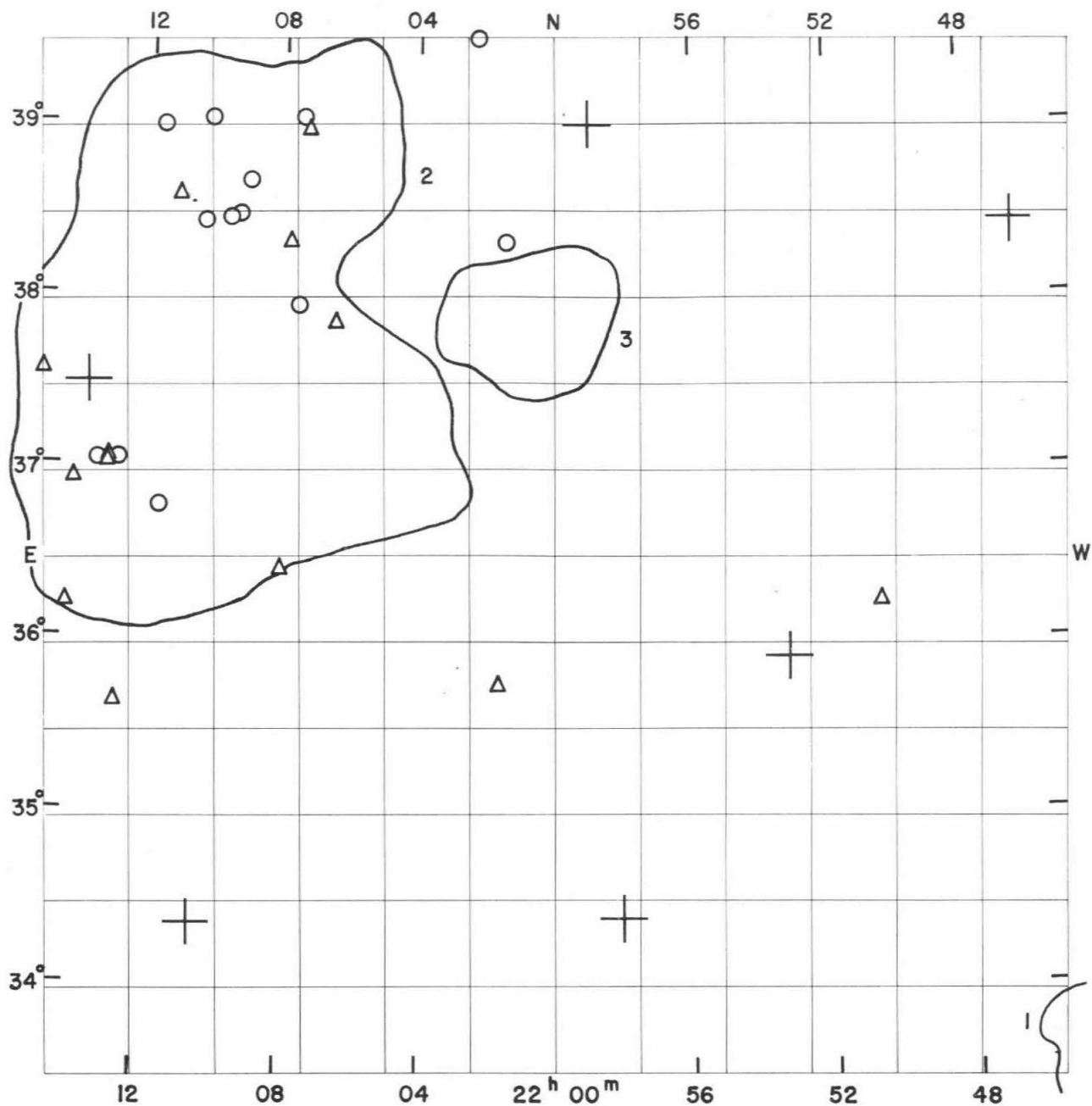
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
2132.6 + 3317	compact	51	2.1	VD	2
2144.7 + 3333	medium compact	134	4.0	MD	1

Average number of galaxies per cluster = 92.5

GALAXIES

Position			NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ				
h	m	o				
21	18.5	+ 37 22		15.3		
21	21.7	+ 39 23		15.7		very compact
21	23.8	+ 37 31		15.7		diffuse
21	26.4	+ 35 05		15.6		star superposed
21	28.2	+ 35 28		15.6		
21	33.5	+ 35 11	1392*	13.0		
21	33.8	+ 35 08		14.5		
21	34.6	+ 35 28		13.7		
21	44.6	+ 38 16		15.2		



FIELD No. 513
 $22^{\text{h}}00^{\text{m}} + 36^{\circ}30'$
 Survey Plate No. 815

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	o	i	"	
30537	21	46	24.6	+	38	24 56	5.80
30693	21	53	12.9	+	35	54 33	6.91
30787	21	58	06.4	+	34	23 21	6.93
30811	21	59	00.0	+	39	00 17	7.08
31081	22	10	34.9	+	34	21 27	5.42
31143	22	13	47.2	+	37	29 57	4.22

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
2144.7 + 3333	medium compact	134	4.0	MD	1
2200.7 + 3752	open	133	5.2	MD	3
2210.0 + 3745	medium compact	173	15.6	Near	2

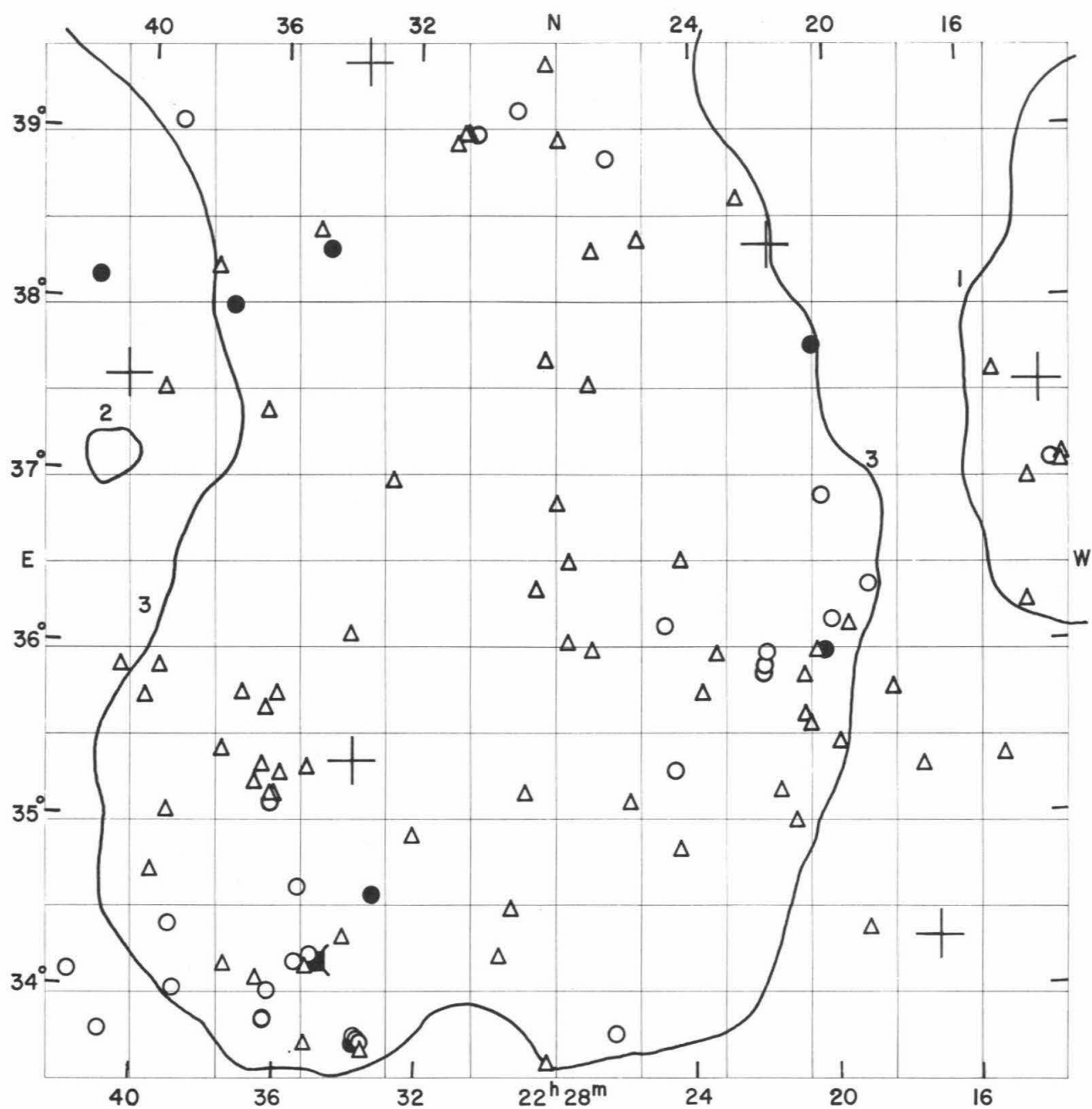
Average number of galaxies per cluster = 146.7

GALAXIES

Position				NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ					
h	m	o	r				
21	50.6	+ 36	13		15.7		
22	01.4	+ 38	18		14.8		
22	01.7	+ 35	45		15.1		
22	02.2	+ 39	30		14.8		
22	06.5	+ 37	50		15.5		
22	07.3	+ 38	58		15.6		
22	07.4	+ 39	02		14.4		
22	07.5	+ 37	57		14.9		
22	07.8	+ 38	18		15.7		
22	08.0	+ 36	24		15.5		diffuse
22	09.0	+ 38	40	5180*	14.8		compact
22	09.3	+ 38	28	7227	15.0		
22	09.6	+ 38	27	7228	15.0		
22	10.2	+ 39	02		14.8		
22	10.3	+ 38	25		14.3		compact
22	11.1	+ 38	35		15.4		
22	11.6	+ 36	47		15.0		
22	11.6	+ 38	59		14.7		
22	12.8	+ 35	38		15.6		
22	12.8	+ 37	03		15.0		
22	13.1	+ 37	03	1441*	15.3		
22	13.2	+ 37	02	7240	15.6	+ 5984	compact
22	13.4	+ 37	03	7242	14.6	+ 5684	double system
22	14.2	+ 36	56		15.6		
22	14.3	+ 36	13		15.6		
22	15.2	+ 37	33		15.7		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
7240	-	-	15.49	S0	15.5	-	-	-
7242	-	-	14.67	E3	14.3	E3	-	-



FIELD No. 514
 $22^{\text{h}}28^{\text{m}} + 36^{\circ}30'$
 Survey Plate No. 778

GC STARS

Nos.	R.A.			Decl.	m_p
	h	m	s	° ' "	
31143	22	13	47.2	+ 37 29 57	4.22
31218	22	17	04.6	+ 34 17 14	7.05
31315	22	21	41.2	+ 38 19 05	6.20
31551	22	33	38.6	+ 39 22 30	5.83
31558	22	33	51.3	+ 35 19 07	6.20
31704	22	40	39.0	+ 37 32 26	6.22

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
2210.0 + 3745	medium compact	173	15.6	Near	1
2231.2 + 3732	open	782	31.8	Near	3
2241.1 + 3703	compact	77	1.7	ED	2

Average number of galaxies per cluster = 344.0

GALAXIES

Position				NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ					
h	m	o	r				
22	13.1	+ 37	03	1441*	15.3		
22	13.2	+ 37	02	7240	15.6	+ 5984	compact
22	13.4	+ 37	03	7242	14.6	+ 5684	double system
22	14.2	+ 36	56		15.6		
22	14.3	+ 36	13		15.6		
22	15.1	+ 35	20		15.2		star superposed
22	15.2	+ 37	33		15.7		
22	17.4	+ 35	16		15.6		
22	18.3	+ 35	44		15.6		compact
22	18.9	+ 36	20		14.8		
22	19.1	+ 34	20		15.5		
22	19.6	+ 36	06	7263	15.7		compact
22	19.8	+ 35	25		15.5		
22	20.0	+ 36	08	7264	14.7		
22	20.2	+ 35	58	7265	13.7		
22	20.3	+ 36	51		14.5		
22	20.5	+ 35	57		15.3		star superposed
22	20.5	+ 37	44		13.8		
22	20.7	+ 35	30		15.7		
22	20.8	+ 35	35		15.3		
22	20.8	+ 35	48		15.3		
22	21.1	+ 34	58		15.7		
22	21.6	+ 35	09		15.6		
22	21.9	+ 35	57	7273	14.8		
22	22.0	+ 35	50	7276	15.0		very compact
22	22.0	+ 35	53	7274	14.2		
22	22.7	+ 38	35		15.7		with loop
22	23.3	+ 35	56		15.6		
22	23.8	+ 35	42		15.7		compact
22	24.3	+ 36	29		15.5		
22	24.4	+ 34	48		15.5		
22	24.5	+ 35	17		14.1		
22	24.8	+ 36	06		14.6		
22	25.6	+ 38	20		15.5		
22	25.9	+ 35	05		15.6		
22	26.2	+ 33	45		14.9		
22	26.6	+ 38	50		15.0		
22	27.0	+ 35	58		15.7		compact
22	27.0	+ 37	30		15.1		
22	27.0	+ 38	16		15.1		double system
22	27.7	+ 36	01		15.7		
22	27.7	+ 36	28		15.5		
22	28.0	+ 36	48		15.6		
22	28.0	+ 38	55		15.7		

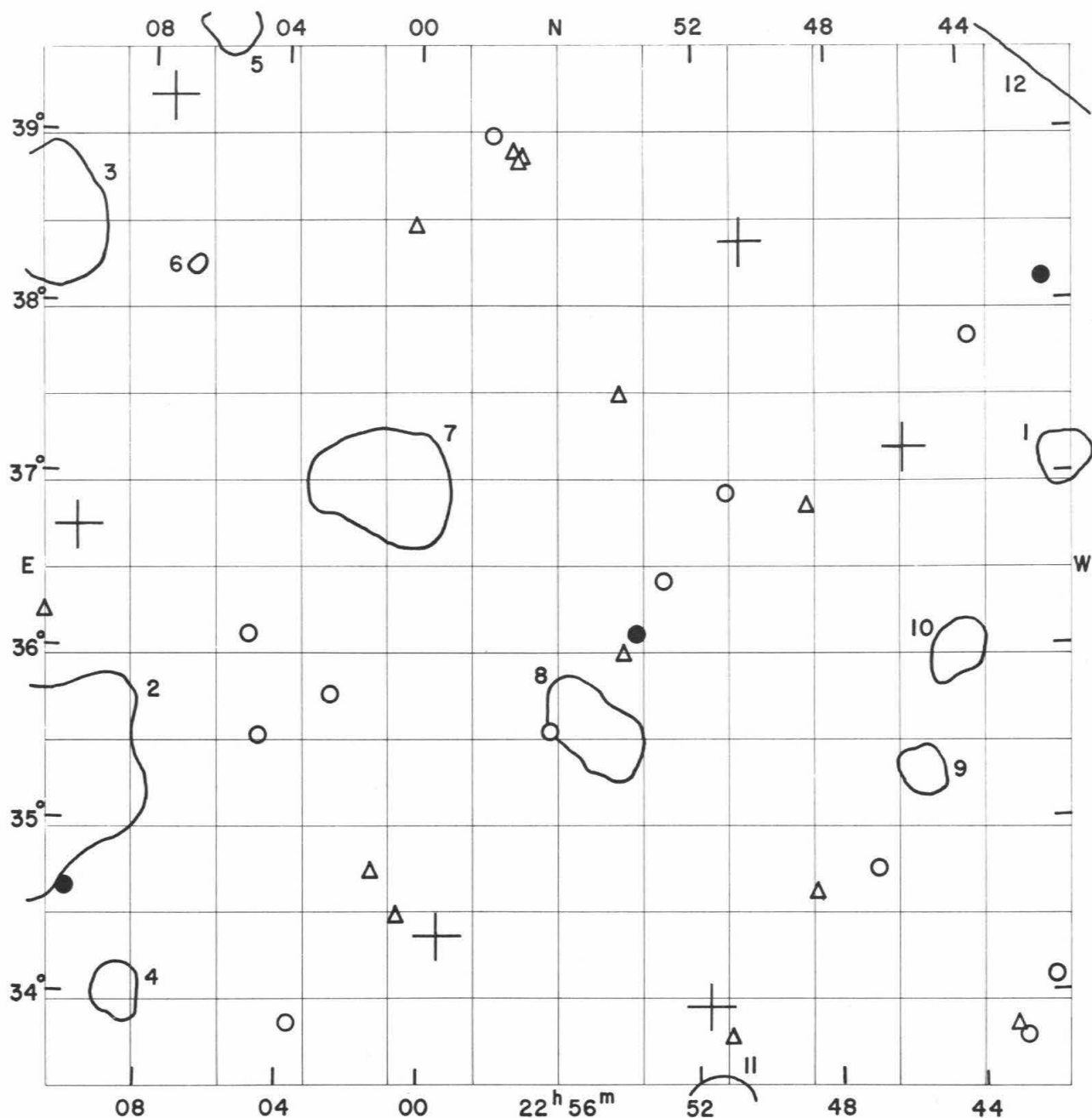
Position a 1950 δ			NGC IC*	m_p	V_s km/sec	Remarks
h	m	s				
22	28.3	+ 33 34		15.5		diffuse
22	28.3	+ 37 38		15.4		
22	28.4	+ 39 22		15.3		
22	28.6	+ 36 18		15.4		
22	28.9	+ 35 08		15.6		
22	29.1	+ 39 06		14.6		double system
22	29.3	+ 34 28		15.4		
22	29.6	+ 34 11		15.7		diffuse double nebula
22	30.3	+ 38 58		14.8		
22	30.6	+ 38 58		15.1		
22	30.7	+ 38 58		15.7		
22	30.9	+ 38 54		15.5		very compact
22	32.1	+ 34 53		15.6		
22	32.8	+ 36 57		15.3		
22	33.2	+ 34 34	7315	13.8		
22	33.6	+ 33 41	7317	15.3	+ 6736	*)
22	33.7	+ 33 43	7318A	14.9	+ 6689	preceding } connecting loops *)
22	33.7	+ 33 43	7318B	14.4	+ 5727	following } *)
22	33.8	+ 33 41	7320	13.8	+ 795	*)
22	33.8	+ 33 43	7319	14.8	+ 6657	*)
22	34.0	+ 36 03		15.6		
22	34.1	+ 34 18		15.7		
22	34.7	+ 38 17	7330	13.6		
22	34.8	+ 34 10	7331	10.4	+ 794	$m_H = 11.2$ Sb
22	35.0	+ 34 12	7335	14.7	+ 6298	
22	35.0	+ 38 23		15.6		
22	35.1	+ 34 07	7337	15.7		
22	35.2	+ 33 40		15.7		
22	35.2	+ 35 17		15.3		compact
22	35.3	+ 34 36		14.9		
22	35.4	+ 34 10	7340	14.9		compact
22	35.9	+ 35 15	7342	15.3		
22	36.0	+ 35 42		15.7		
22	36.1	+ 35 07		15.4		
22	36.2	+ 33 59		15.0		compact
22	36.2	+ 35 05		15.0		
22	36.2	+ 35 08		15.7		
22	36.3	+ 33 48	7343	14.3	+ 1216	
22	36.4	+ 35 17	7345	15.1		
22	36.4	+ 35 37		15.6		
22	36.4	+ 37 20		15.2		
22	36.5	+ 34 03		15.4		
22	36.7	+ 35 11		15.4		compact
22	37.1	+ 35 42		15.7		compact
22	37.4	+ 34 07		15.2		
22	37.6	+ 37 57		14.0		
22	37.7	+ 35 22		15.7		
22	38.0	+ 38 10		15.7		
22	38.9	+ 34 00		15.0		
22	39.0	+ 34 22		14.8		compact
22	39.2	+ 35 01		15.4		
22	39.2	+ 39 02		14.8		
22	39.5	+ 35 51		15.2		double system
22	39.5	+ 37 27		15.6		
22	39.6	+ 34 40		15.5		double nebula, star superposed
22	39.9	+ 35 40		15.5		compact
22	40.6	+ 35 51		15.7		
22	41.0	+ 33 45	7363	14.6		

a	Position		NGC IC*	m _p	V _s km/sec	Remarks
	1950	δ				
h	m	o				
22	41.6	+ 38 06		13.7		
22	41.9	+ 34 05	7369	14.8		

*) These galaxies constitute "Stefan's Quintet"

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
7240	-	-	15.49	S0	15.5	-	-	-
7242	-	-	14.67	E3	14.3	E3	-	-
7317	-	-	15.21	E4	15.3	E4	-	-
7318A	-	-	14.75	E2	14.8	E2	-	-
7318B	-	-	15.01	SBb	14.9	SBb	-	-
7319	-	-	13.65	SBb	13.7	SBb	-	-
7331	10.1	Sb	10.56	Sb	10.2	Sb	10.27	Sb+
7335	-	-	-	-	-	Sa	-	-
7343	-	-	14.42	E3	14.5	E3	-	-



FIELD No. 515
 $22^{\text{h}}56^{\text{m}} + 36^{\circ}30'$
 Survey Plate No. 838

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	°	'	"	
31824	22	45	53.3	+ 37	09	11	6.00
31909	22	50	35.9	+ 38	21	00	7.12
31938	22	51	41.7	+ 33	56	08	7.40
32092	22	59	29.2	+ 34	20	36	6.71
32268	23	07	30.9	+ 39	11	53	6.51
32309	23	10	01.6	+ 36	41	44	6.84

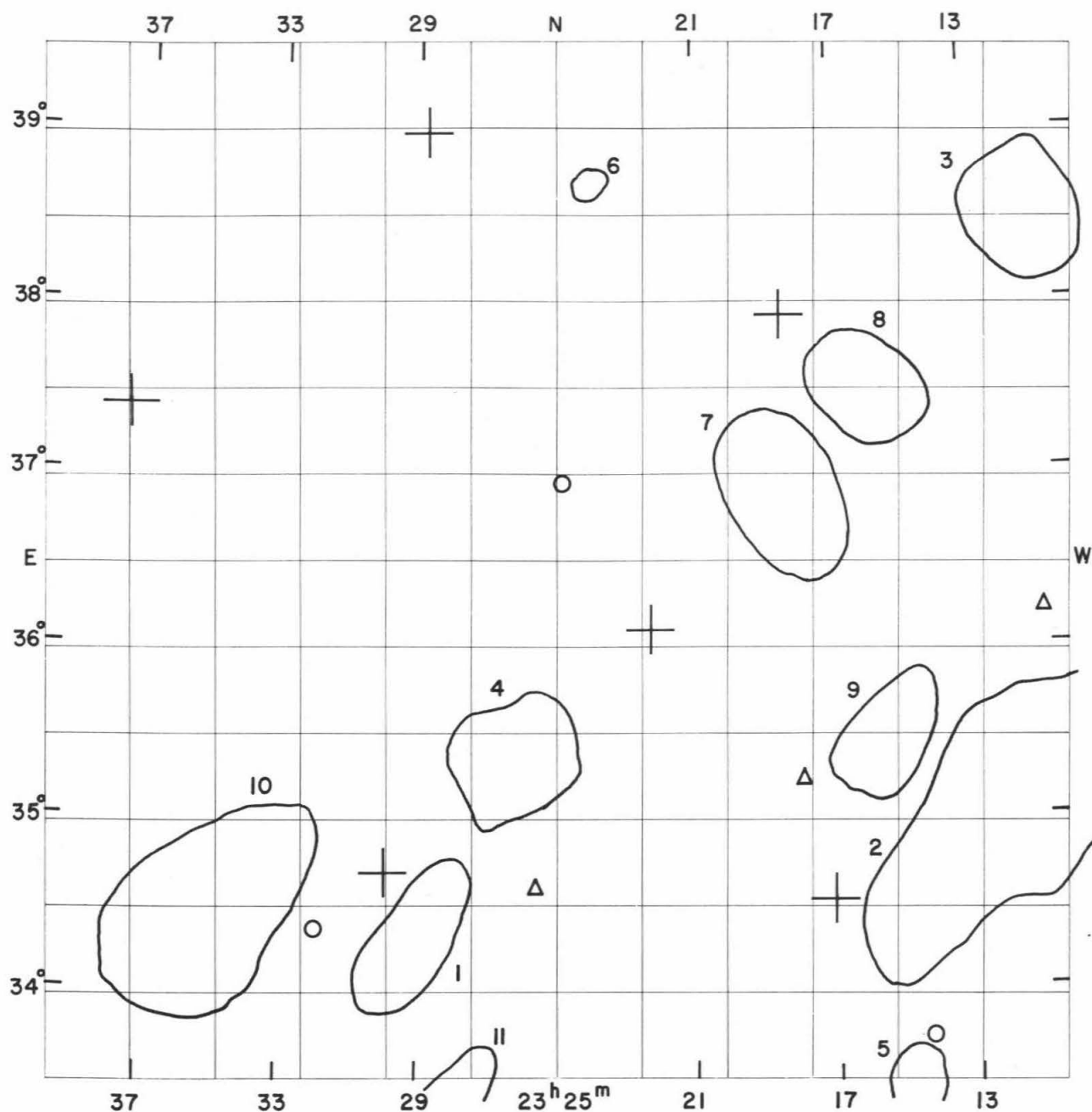
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
2231.2 + 3732	open	782	31.8	Near	12
2241.1 + 3703	compact	77	1.7	ED	1
2244.4 + 3558	medium compact	59	1.8	ED	10
2245.6 + 3516	medium compact	89	1.5	ED	9
2252.6 + 3135	open	119	11.3	Near	11
2255.0 + 3531	medium compact	107	2.9	VD	8
2301.0 + 3656	medium compact	65	4.1	VD	7
2305.8 + 3935	compact	55	1.6	VD	5
2306.7 + 3813	compact	35	0.5	ED	6
2308.5 + 3400	compact	70	1.6	ED	4
2311.1 + 3830	medium compact	67	4.0	D	3
2312.0 + 3502	open	140	7.9	MD	2

Average number of galaxies per cluster = 138.8

GALAXIES

Position			NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ				
h	m	o				
22	41.6	+ 38 06		13.7		
22	41.9	+ 34 05	7369	14.8		
22	42.8	+ 33 44		14.5		
22	43.0	+ 33 47		15.6		
22	43.9	+ 37 48		14.5		
22	46.9	+ 34 44		15.0		
22	48.6	+ 34 35		15.5		compact
22	48.8	+ 36 49	7395	15.3		
22	51.1	+ 33 45		15.7		
22	51.1	+ 36 54		15.0		compact
22	52.9	+ 36 24		14.8		
22	53.7	+ 36 05	7426	13.6		
22	54.1	+ 35 58		15.6		
22	54.2	+ 37 28		15.7		diffuse
22	56.2	+ 35 32	7440	14.6		
22	57.1	+ 38 50	7445	15.6		
22	57.2	+ 38 48	7446	15.7		
22	57.3	+ 38 52	7449	15.4		compact
22	57.9	+ 38 58		15.0		
23	00.2	+ 38 26		15.5		
23	00.6	+ 34 28		15.5		
23	01.4	+ 34 43		15.1		
23	02.6	+ 35 45		15.0		
23	03.7	+ 33 50	7485	14.2		
23	04.6	+ 35 30		14.5		
23	05.0	+ 36 05		14.8		
23	10.0	+ 34 37	7514	13.5		
23	10.9	+ 36 12		15.5		



FIELD No. 516
 $23^{\text{h}}25^{\text{m}} + 36^{\circ}30'$
 Survey Plate No. 873

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	o	i	"	
32473	23	17	01.9	+	34	31 10	6.14
32510	23	18	28.1	+	37	54 32	5.75
32576	23	22	17.3	+	36	05 15	6.82
32703	23	28	49.5	+	38	57 41	5.34
32738	23	29	56.7	+	34	40 35	6.55
32882	23	37	33.8	+	37	22 35	6.23

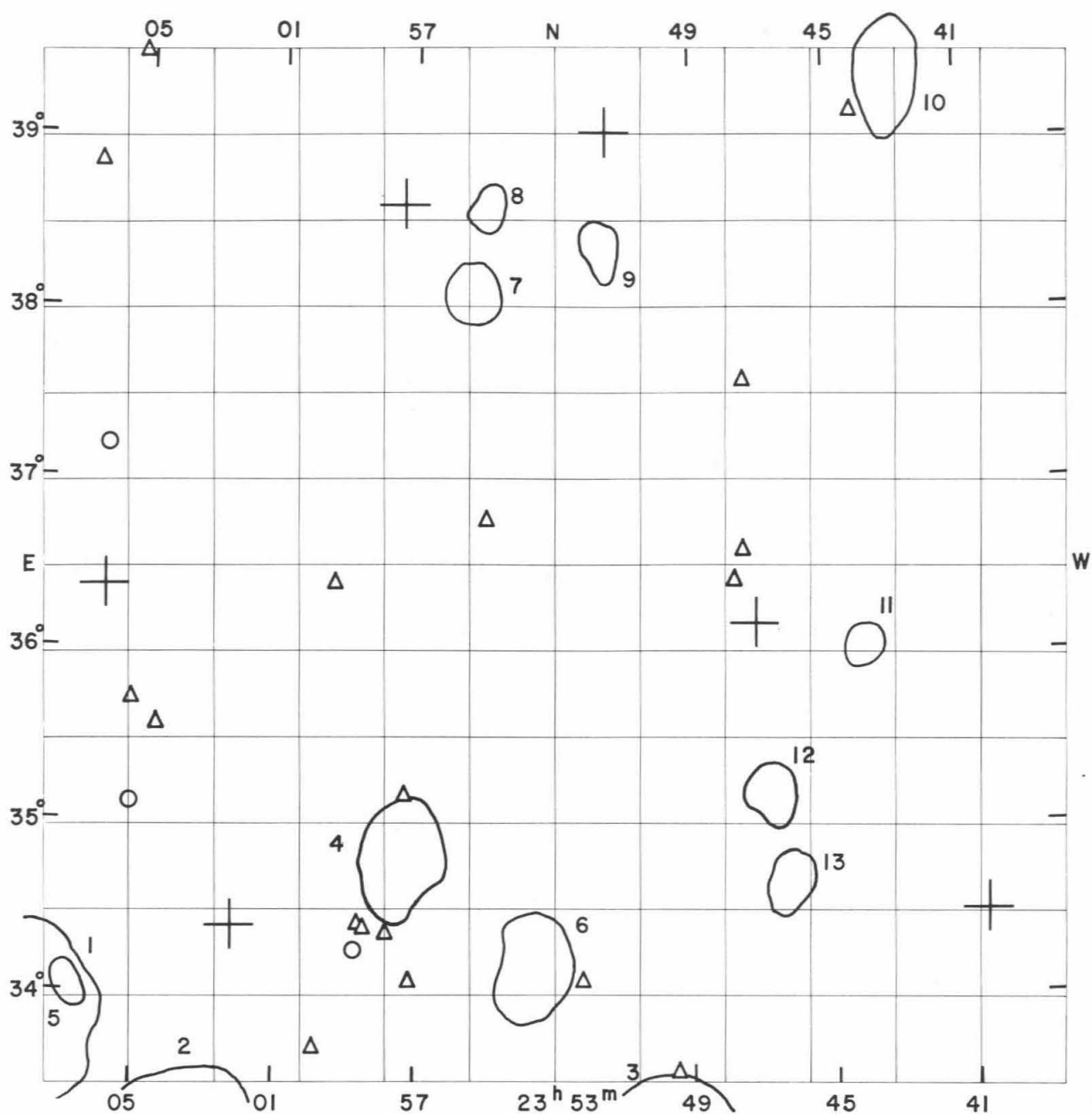
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
2311.1 + 3830	medium compact	67	4.0	D	3
2312.0 + 3502	open	140	7.9	MD	2
2314.8 + 3325	medium compact	54	2.1	VD	5
2315.6 + 3525	medium compact	104	3.4	D	9
2315.8 + 3727	medium compact	88	3.6	VD	8
2318.4 + 3651	medium compact	69	4.5	D	7
2324.1 + 3840	medium compact	32	1.0	ED	6
2326.3 + 3519	compact	123	4.0	VD	4
2327.8 + 3323	medium compact	83	2.2	VD	11
2329.1 + 3416	medium compact	222	3.7	D	1
2335.1 + 3423	open	103	6.3	MD	10

Average number of galaxies per cluster = 98.6

GALAXIES

Position 1950			NGC IC*	m _p	V _s km/sec	Remarks
α	δ					
h	m	s				
23	10.9	+ 36 12		15.5		
23	14.3	+ 33 43		14.1		
23	17.9	+ 35 14		15.3		
23	24.9	+ 36 57		14.8		
23	25.6	+ 34 35		15.7		very compact
23	31.9	+ 34 21		14.6		



FIELD No. 517
 $23^{\text{h}}53^{\text{m}} + 36^{\circ}30'$
 Survey Plate No. 405

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	°	'	"	
32938	23	40	37.2	+	34	28 13	7.35
33063	23	47	09.6	+	36	08 52	5.91
33155	23	51	31.8	+	39	00 14	6.71
33282	23	57	27.7	+	38	34 52	6.61
44	0	02	16.1	+	34	22 49	6.23
131	0	06	06.1	+	36	21 01	6.14

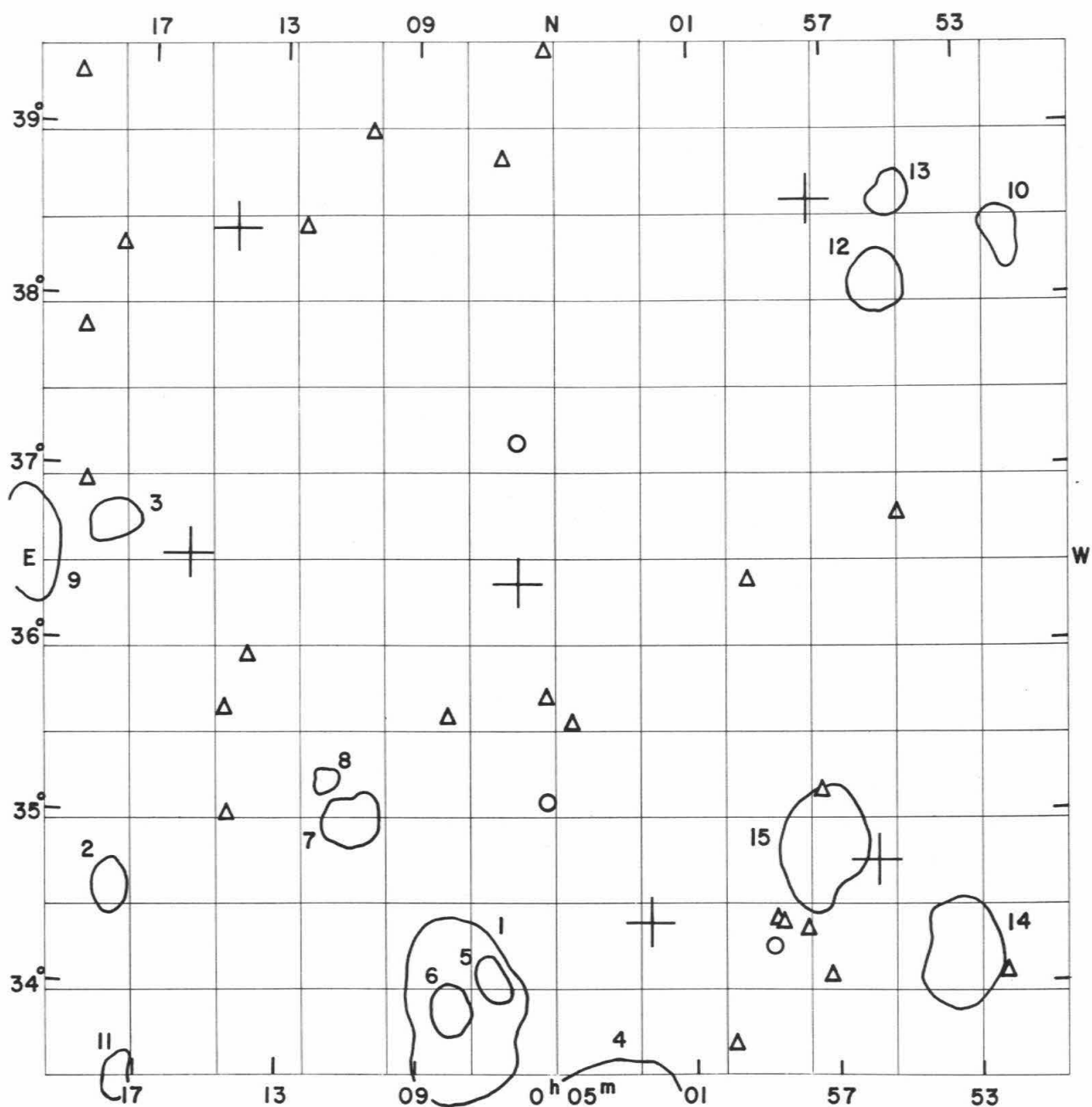
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
2343.0 + 3921	medium compact	83	2.8	D	10
2344.0 + 3601	compact	69	1.3	VD	11
2346.2 + 3440	open	60	1.7	VD	13
2346.8 + 3511	compact	93	1.8	VD	12
2349.7 + 3259	open	170	5.3	MD	3
2351.7 + 3821	open	96	1.4	ED	9
2353.6 + 3410	compact	101	2.9	VD	6
2355.0 + 3834	compact	55	1.1	ED	8
2355.4 + 3804	medium compact	86	1.9	ED	7
2357.4 + 3449	open	76	3.2	D	4
0003.6 + 3250	open	135	6.5	MD	2
0006.8 + 3401	compact	72	1.3	ED	5
0007.8 + 3348	open	105	4.7	VD	1

Average number of galaxies per cluster = 92.4

GALAXIES

Position			NGC IC*	m_p	V_s km/sec	Remarks
α	1950	δ				
h	m	o				
23	44.1	+ 39 07		15.7		very diffuse
23	47.5	+ 37 33		15.6		double system
23	47.6	+ 36 35		15.5		
23	47.8	+ 36 23		15.4		
23	49.4	+ 33 32		15.6		
23	52.2	+ 34 04		15.6		very compact
23	55.0	+ 36 45		15.7		
23	57.2	+ 34 04		15.6		
23	57.3	+ 35 09		15.7		
23	57.8	+ 34 20		15.5		
23	58.5	+ 34 22		15.7		
23	58.7	+ 34 24		15.4		
23	58.8	+ 34 15	5376*	14.7		
23	59.4	+ 36 22		15.4		
23	59.9	+ 33 40		15.7		
0	04.5	+ 35 32		15.6		
0	05.2	+ 35 05	5	14.6		compact
0	05.2	+ 35 41		15.6		
0	05.3	+ 39 27		15.4		
0	06.1	+ 37 10	11	14.5		
0	06.6	+ 38 49		15.7		



FIELD No. 518

$0^h 05^m + 36^\circ 30'$

Survey Plate No. 1247

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	°	'	"	
33243	23	55	47.9	+	34	44 05	6.71
33282	23	57	27.7	+	38	34 52	6.61
44	0	02	16.1	+	34	22 49	6.23
131	0	06	06.1	+	36	21 01	6.14
334	0	14	28.3	+	38	24 15	4.44
362	0	15	42.5	+	36	30 30	4.51

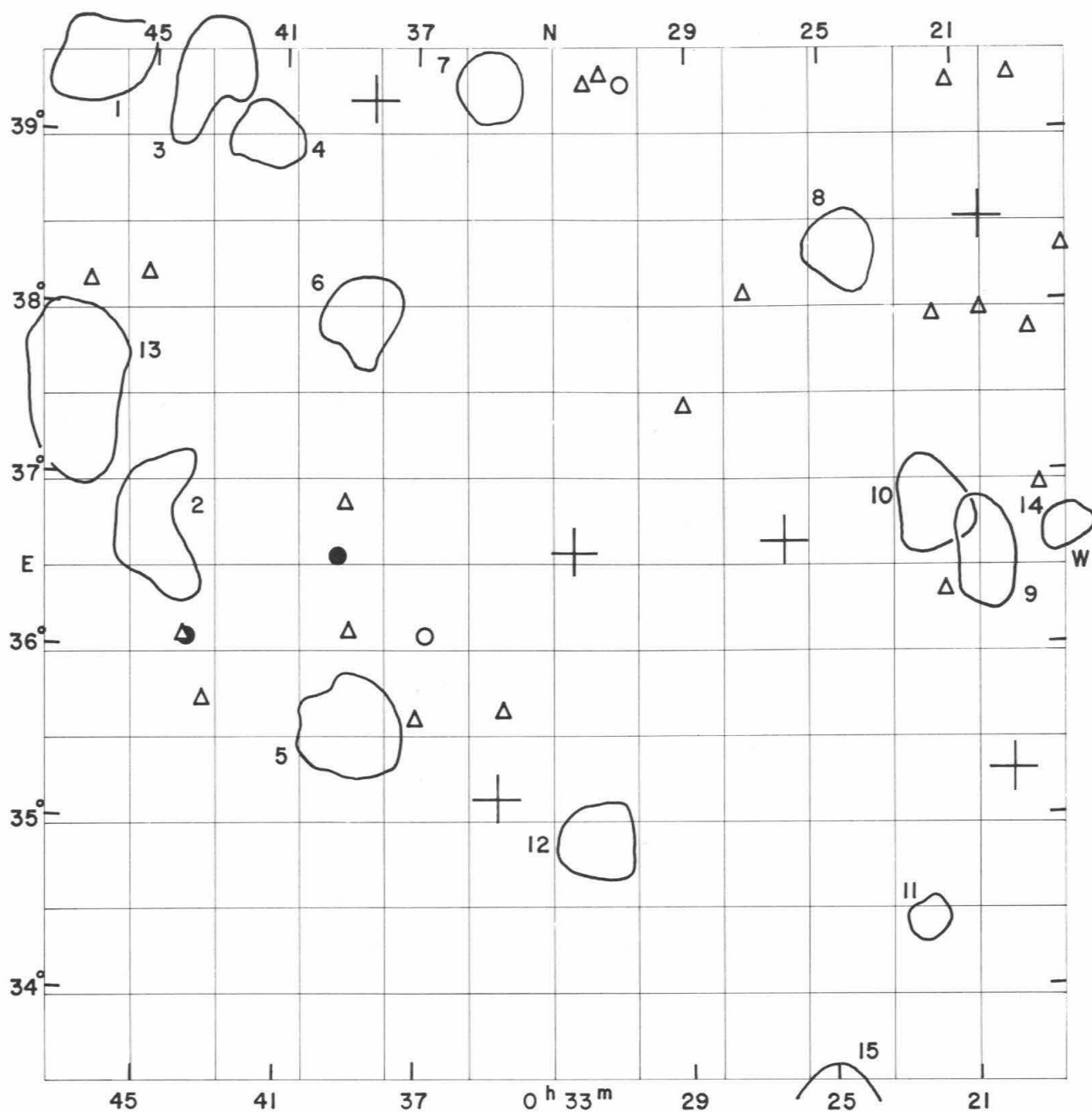
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
2351.7 + 3821	open	96	1.4	ED	10
2353.6 + 3410	compact	101	2.9	VD	14
2355.0 + 3834	compact	55	1.1	ED	13
2355.4 + 3804	medium compact	86	1.9	ED	12
2357.4 + 3449	open	76	3.2	D	15
0003.6 + 3250	open	135	6.5	MD	4
0006.8 + 3401	compact	72	1.3	ED	5
0007.8 + 3348	open	105	4.7	VD	1
0008.0 + 3351	medium compact	77	1.4	ED	6
0010.9 + 3457	medium compact	90	1.8	ED	7
0011.6 + 3512	compact	50	0.9	ED	8
0017.6 + 3327	compact	87	1.2	ED	11
0017.7 + 3434	medium compact	74	1.4	ED	2
0017.9 + 3641	compact	87	1.5	ED	3
0020.4 + 3631	compact	124	2.7	VD	9

Average number of galaxies per cluster = 87.7

GALAXIES

Position			NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ				
h	m	o				
23	52.2	+ 34 04		15.6		very compact
23	55.0	+ 36 45		15.7		
23	57.2	+ 34 04		15.6		
23	57.3	+ 35 09		15.7		
23	57.8	+ 34 20		15.5		
23	58.5	+ 34 22		15.7		
23	58.7	+ 34 24		15.4		
23	58.8	+ 34 15	5376*	14.7		
23	59.4	+ 36 22		15.4		
23	59.9	+ 33 40		15.7		
0	04.5	+ 35 32		15.6		
0	05.2	+ 35 05	5	14.6		compact
0	05.2	+ 35 41		15.6		
0	05.3	+ 39 27		15.4		
0	06.1	+ 37 10	11	14.5		
0	06.6	+ 38 49		15.7		
0	08.1	+ 35 35		15.5		
0	10.4	+ 38 58		15.4		
0	12.3	+ 38 24		15.7		
0	14.0	+ 35 55		15.5		
0	14.5	+ 35 00		15.7		
0	14.6	+ 35 36		15.7		
0	17.8	+ 38 17		15.7		
0	18.7	+ 36 55		15.7		
0	18.9	+ 37 49		15.3		
0	19.2	+ 39 18		15.7		



FIELD No. 519

$0^{\text{h}}33^{\text{m}} + 36^{\circ}30'$

Survey Plate No. 398

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	o	'	"	
443	0	19	45.4	+	35	15 34	7.67
453	0	20	18.5	+	38	28 37	6.95
563	0	26	16.9	+	36	37 25	6.42
691	0	32	28.6	+	36	33 26	6.82
738	0	34	40.1	+	35	07 29	5.62
812	0	38	24.0	+	39	11 04	5.42

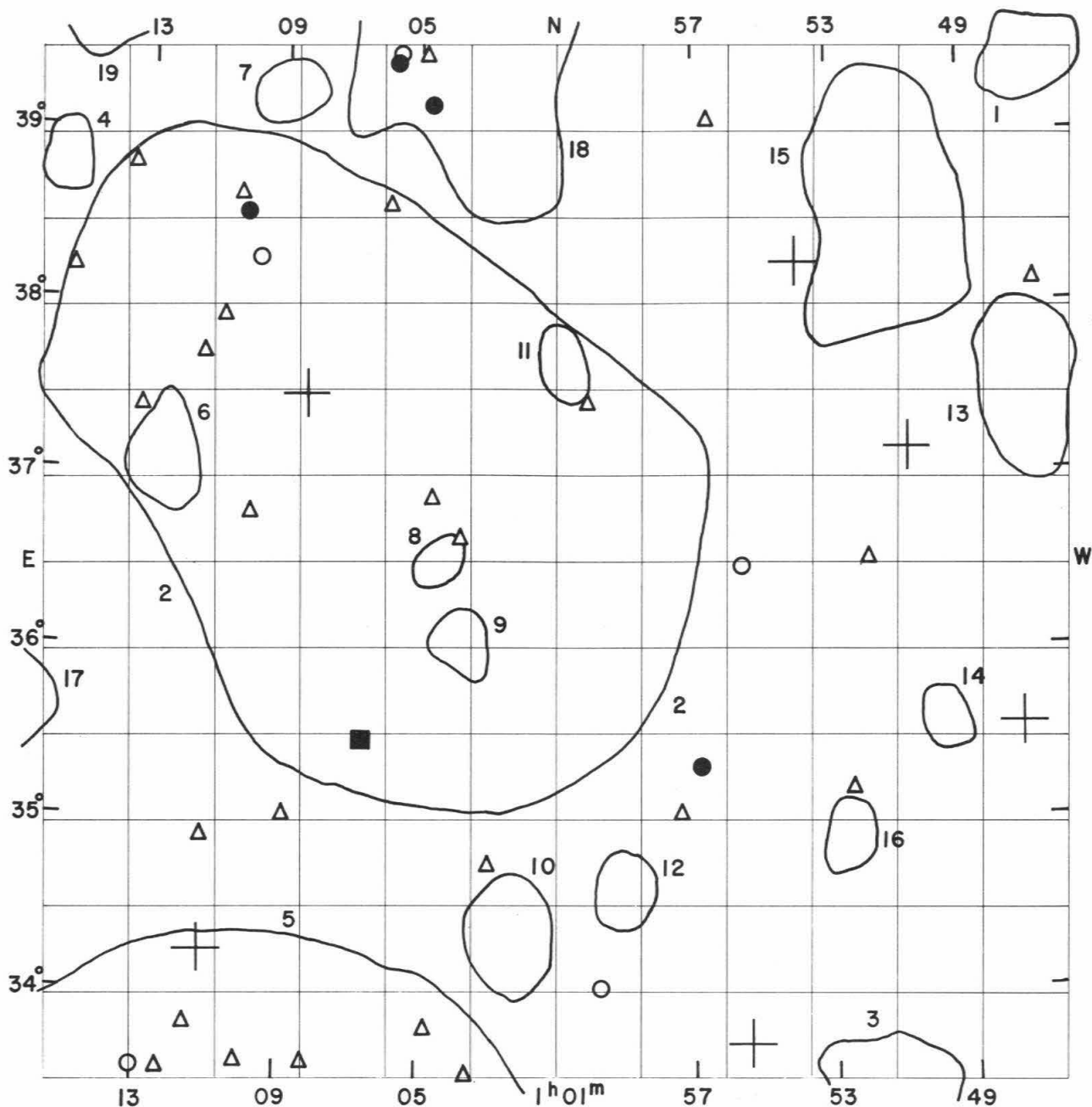
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0017.9 + 3641	compact	87	1.5	ED	14
0020.4 + 3631	compact	124	2.7	VD	9
0021.9 + 3648	medium compact	92	2.6	MD	10
0022.3 + 3424	compact	57	1.3	ED	11
0024.4 + 3818	medium compact	98	2.2	ED	8
0025.1 + 3310	compact	108	3.5	D	15
0031.7 + 3453	open	96	2.4	VD	12
0034.9 + 3916	open	73	2.1	VD	7
0038.7 + 3756	medium compact	98	2.3	VD	6
0038.9 + 3532	medium compact	99	3.3	D	5
0041.7 + 3859	medium compact	96	2.1	ED	4
0043.3 + 3920	medium compact	101	3.0	D	3
0044.8 + 3642	medium compact	95	3.3	VD	2
0046.8 + 3924	medium compact	101	3.0	VD	1
0047.1 + 3729	open	119	4.3	D	13

Average number of galaxies per cluster = 96.3

GALAXIES

Position				NGC IC*	m_p	V_s km/sec	Remarks
α	1950	δ					
h	m	o	'				
0	17.8	+38	17		15.7		
0	18.7	+36	55		15.7		
0	18.9	+37	49		15.3		
0	19.2	+39	18		15.7		
0	20.3	+37	56		15.6		
0	21.2	+39	16		15.7		
0	21.6	+36	18		15.7		double nebula
0	21.8	+37	55	1550*	15.1		compact
0	27.4	+38	03		15.5		
0	29.2	+37	24		15.7		
0	31.0	+39	17		15.0		
0	31.7	+39	20		15.5		
0	32.1	+39	17		15.4		diffuse
0	34.5	+35	38		15.5		
0	36.8	+36	05		14.9		
0	37.0	+35	35		15.5		
0	39.0	+36	05	218	15.5		peculiar
0	39.2	+36	50		15.7		
0	39.4	+36	32		14.0		
0	43.2	+35	41		15.7		
0	43.8	+36	03		13.6		tidal effects
0	43.9	+36	04		15.6		
0	45.0	+38	09		15.4		
0	46.9	+38	06		15.7		



FIELD No. 520

$1^{\text{h}}01^{\text{m}} + 36^{\circ}30'$

Survey Plate No. 406

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	°	'	"	
1000	0	47	32.8	+	35	31 51	8.67
1060	0	50	42.9	+	37	08 51	6.13
1122	0	53	58.2	+	38	13 43	3.94
1159	0	55	29.4	+	33	40 56	6.22
1432	1	08	21.2	+	37	27 31	5.75
1479	1	11	13.2	+	34	13 41	7.03

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0046.8 + 3924	medium compact	101	3.0	VD	1
0047.1 + 3729	open	119	4.3	D	13
0049.7 + 3533	medium compact	80	1.7	ED	14
0051.1 + 3830	open	102	6.8	MD	15
0051.7 + 3322	medium compact	93	4.3	MD	3
0052.6 + 3453	medium compact	82	2.0	VD	16
0059.0 + 3434	open	128	2.2	ED	12
0100.8 + 3737	medium compact	85	1.9	ED	11
0102.3 + 3418	medium compact	178	3.2	VD	10
0103.7 + 3600	compact	99	2.0	ED	9
0103.7 + 3942	medium compact	163	9.1	Near	18
0104.4 + 3628	compact	81	1.6	ED	8
0105.5 + 3650	open	190	19.7	Near	2
0107.5 + 3212	medium compact	625	32.0	Near	5
0108.9 + 3912	compact	102	2.1	ED	7
0112.5 + 3703	medium compact	124	2.8	MD	6
0114.4 + 3944	medium compact	87	3.3	D	19
0115.7 + 3849	medium compact	66	1.9	VD	4
0117.4 + 3538	medium compact	122	3.9	D	17

Average number of galaxies per cluster = 138.3

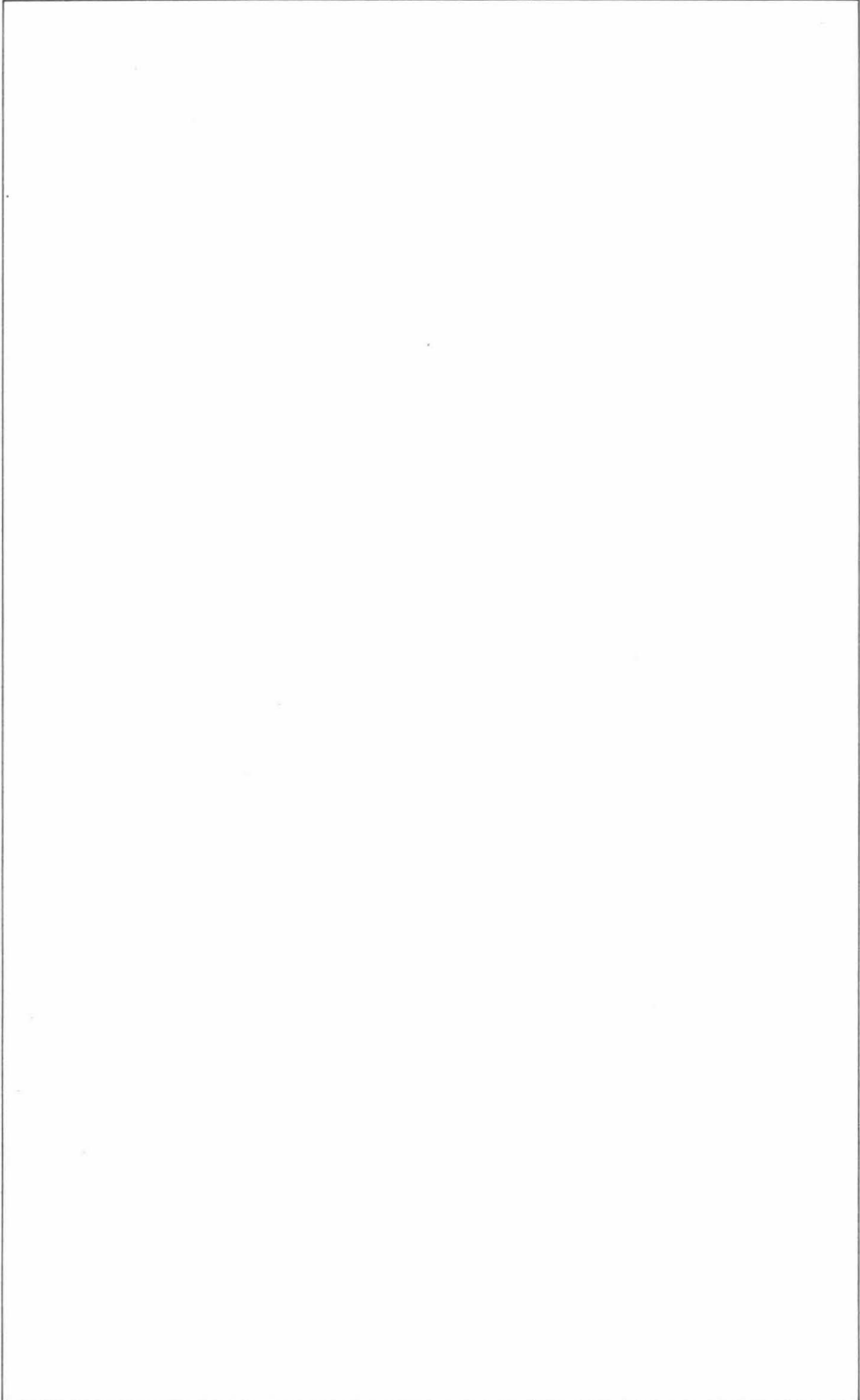
GALAXIES

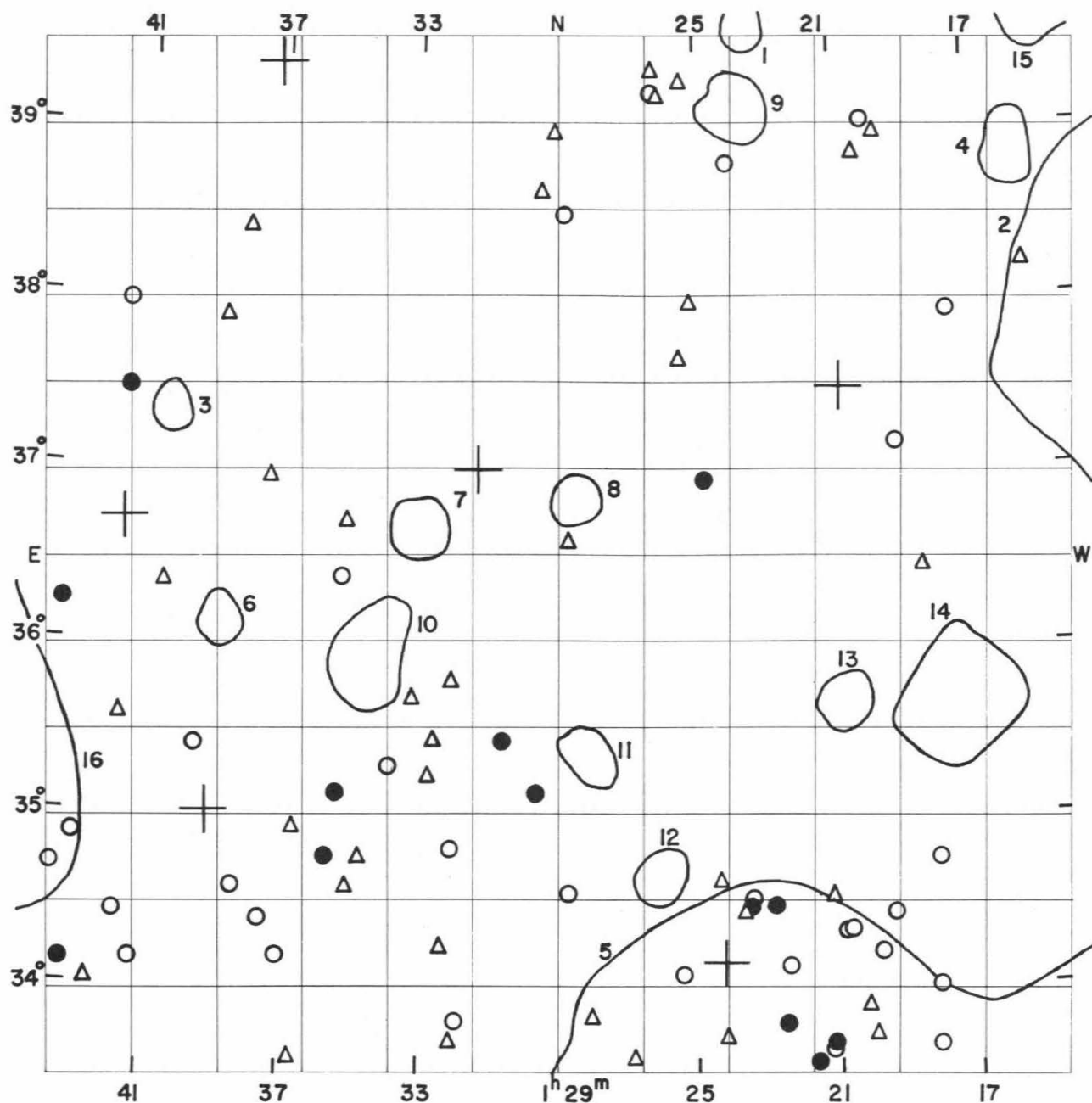
Position			NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ				
h	m	o				
0	46.9	+ 38 06		15.7		
0	51.9	+ 36 30		15.7		
0	52.5	+ 35 10		15.7		
0	55.7	+ 36 28		14.5		
0	56.6	+ 39 03		15.7		
0	56.8	+ 35 18		14.0		
0	57.4	+ 35 01		15.4		
0	59.8	+ 34 00		14.9		
1	00.1	+ 37 24		15.6		
1	03.0	+ 34 44		15.4		
1	03.6	+ 33 30		15.1		
1	03.8	+ 36 38		15.7		
1	04.7	+ 36 51		15.7		
1	04.7	+ 39 08		13.8		
1	04.8	+ 33 46		15.6		
1	04.9	+ 39 25		15.7		
1	05.7	+ 39 26	389	15.0		
1	05.8	+ 39 23	393	13.3		
1	06.0	+ 38 33		15.6		
1	06.7	+ 35 27	404	11.3	- 36	m _H = 11.9 E diffuse
1	08.3	+ 33 35		15.5		
1	08.9	+ 35 00		15.3		
1	09.8	+ 38 14		14.6		
1	10.0	+ 36 45		15.3		
1	10.1	+ 33 35		15.7		
1	10.2	+ 38 30	425	13.5		
1	10.4	+ 38 37	1647*	15.2		
1	10.8	+ 37 55		15.5		
1	11.2	+ 34 54		15.7		

Position				NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ					
h	m	o	r				
1	11.4	+ 37	41		15.5		
1	11.6	+ 33	48		15.7		diffuse
1	12.3	+ 33	32		15.3		
1	13.0	+ 33	33		14.8		
1	13.2	+ 37	23		15.7		
1	13.6	+ 38	47		15.1		
1	15.3	+ 38	11		15.1		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
404	-	-	11.55	S0	11.4	S0	11.16	S0





FIELD No. 521

$1^h 29^m + 36^\circ 30'$

Survey Plate No. 1189

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	o	i	"	
1681	1	20	48.4	+	37	27 17	5.53
1744	1	24	15.2	+	34	07 06	6.28
1892	1	31	22.8	+	36	58 54	5.77
2020	1	37	20.4	+	39	20 06	7.29
2064	1	39	09.6	+	34	59 39	5.45
2122	1	41	43.0	+	36	41 17	7.32

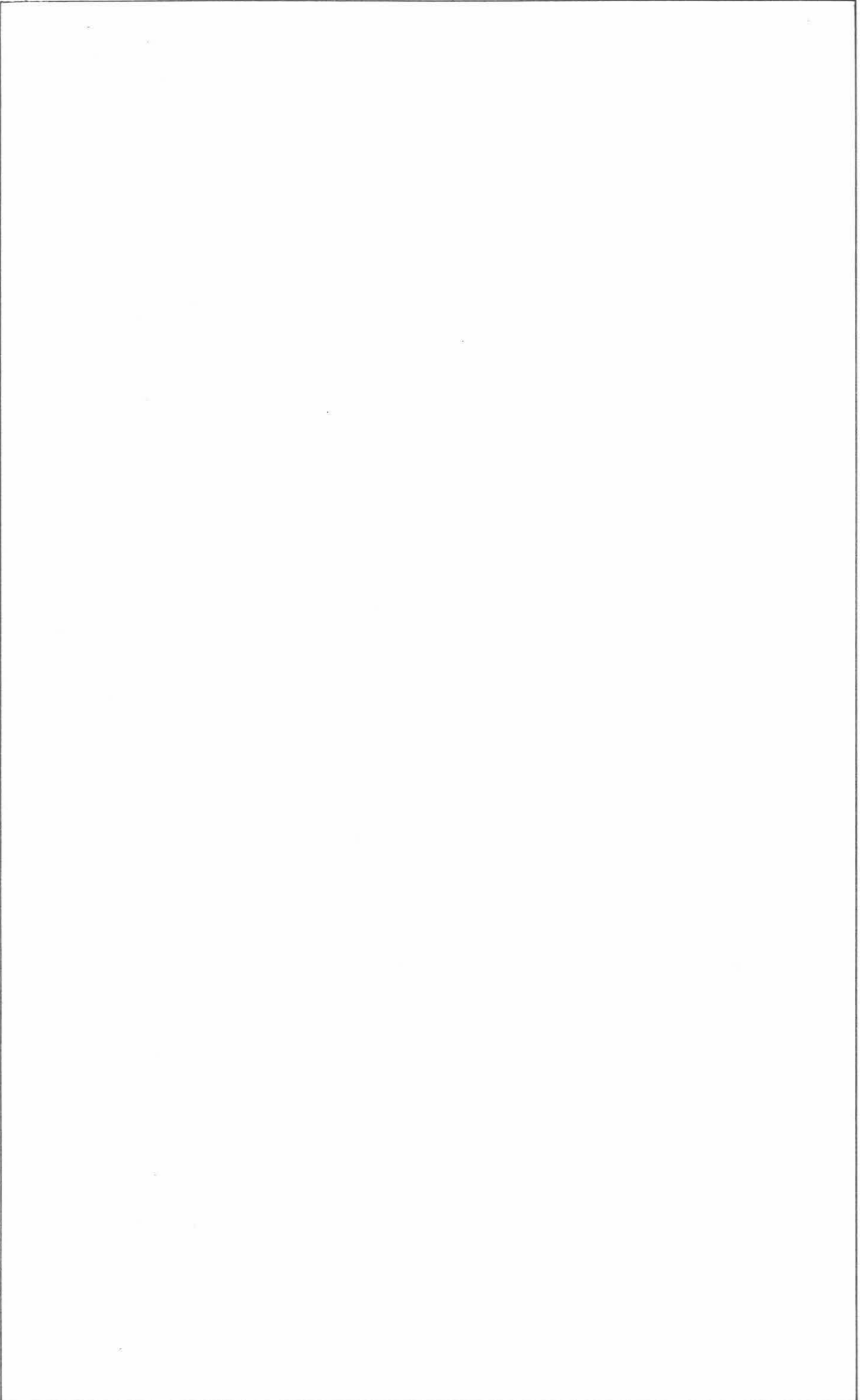
CLUSTERS OF GALAXIES

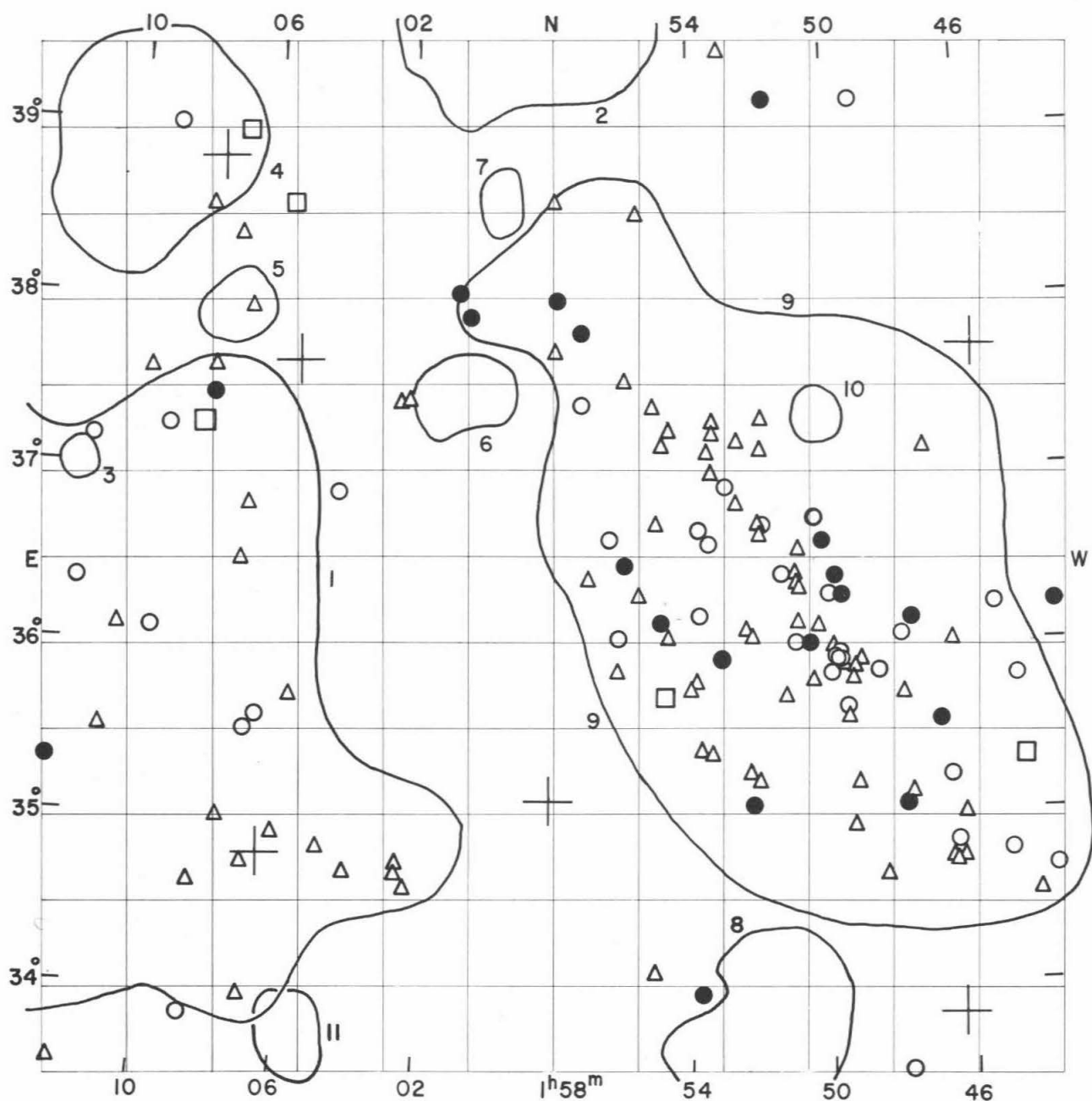
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0105.5 + 3650	open	190	19.7	Near	2
0107.5 + 3212	medium compact	625	32.0	Near	5
0114.4 + 3944	medium compact	87	3.3	D	15
0115.7 + 3849	medium compact	66	1.9	VD	4
0117.4 + 3538	medium compact	122	3.9	D	14
0120.8 + 3538	compact	85	1.7	ED	13
0123.5 + 3933	medium compact	69	1.4	ED	1
0123.8 + 3904	medium compact	80	2.2	VD	9
0126.0 + 3435	compact	75	1.7	ED	12
0128.1 + 3519	medium compact	70	1.8	ED	11
0128.4 + 3647	medium compact	80	1.6	ED	8
0132.9 + 3638	open	64	1.9	VD	7
0134.4 + 3553	medium compact	76	2.9	VD	10
0138.8 + 3605	medium compact	83	1.4	ED	6
0140.2 + 3718	medium compact	59	1.3	ED	3
0150.8 + 3615	medium compact	450	18.9	Near	16

Average number of galaxies per cluster = 142.6

GALAXIES

Position α 1950 δ	NGC IC*	m _p	V _s km/sec	Remarks
h m o				
1 15.3 + 38 11		15.1		
1 17.7 + 37 54		14.9		
1 18.1 + 34 44		14.8		
1 18.2 + 33 38		14.7		
1 18.2 + 34 00	1675*	14.3		
1 18.4 + 36 25		15.4		
1 19.2 + 37 09		14.4		
1 19.4 + 34 25		14.4		
1 19.7 + 38 57		15.2		
1 19.8 + 34 11	1683*	14.2		
1 20.0 + 33 42		15.5		
1 20.0 + 39 00		14.6		
1 20.2 + 33 52		15.7		
1 20.3 + 38 49		15.3		
1 20.7 + 34 19		14.7		extremely compact
1 20.8 + 34 19		14.9		
1 21.2 + 33 36		14.9		
1 21.2 + 33 39	512	14.0		
1 21.2 + 34 30		15.7		
1 21.7 + 33 33	513	13.4		
1 22.4 + 34 06		15.0		
1 22.5 + 33 46	523	13.5		peculiar
1 22.9 + 34 28	529	13.1		
1 23.5 + 34 30		14.9		
1 23.6 + 34 27	536	13.2		
1 23.7 + 34 25	542	15.4		
1 24.1 + 38 45		14.8		
1 24.2 + 33 42		15.6		
1 24.4 + 34 36		15.7		
1 24.8 + 36 55	551	13.5		
1 25.2 + 37 58		15.7		extremely diffuse
1 25.4 + 34 03	561	14.1		





FIELD No. 522

$l^h 58^m + 36^{\circ} 30'$

Survey Plate No. 1225

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	o	'	"	
2193	1	45	41.3	+	37	42 17	6.05
2203	1	46	16.7	+	33	48 43	8.5
2429	1	58	07.6	+	35	03 51	8.12
2552	2	05	27.7	+	37	37 23	4.77
2572	2	06	33.6	+	34	45 06	3.08
2600	2	07	50.2	+	38	48 16	6.05

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0150.2 + 3718	medium compact	83	1.6	ED	10
0150.8 + 3615	medium compact	450	18.9	Near	9
0152.0 + 3337	medium compact	144	6.3	D	8
0159.0 + 3932	open	163	6.6	MD	2
0159.6 + 3833	medium compact	138	1.7	ED	7
0200.7 + 3725	medium compact	81	2.8	VD	6
0205.5 + 3342	medium compact	69	2.5	VD	11
0207.3 + 3755	compact	74	2.2	ED	5
0210.0 + 3852	medium compact	173	7.0	MD	4
0212.0 + 3701	compact	57	1.2	VD	3
0216.0 + 3625	medium compact	485	24.1	Near	1

Average number of galaxies per cluster = 174.3

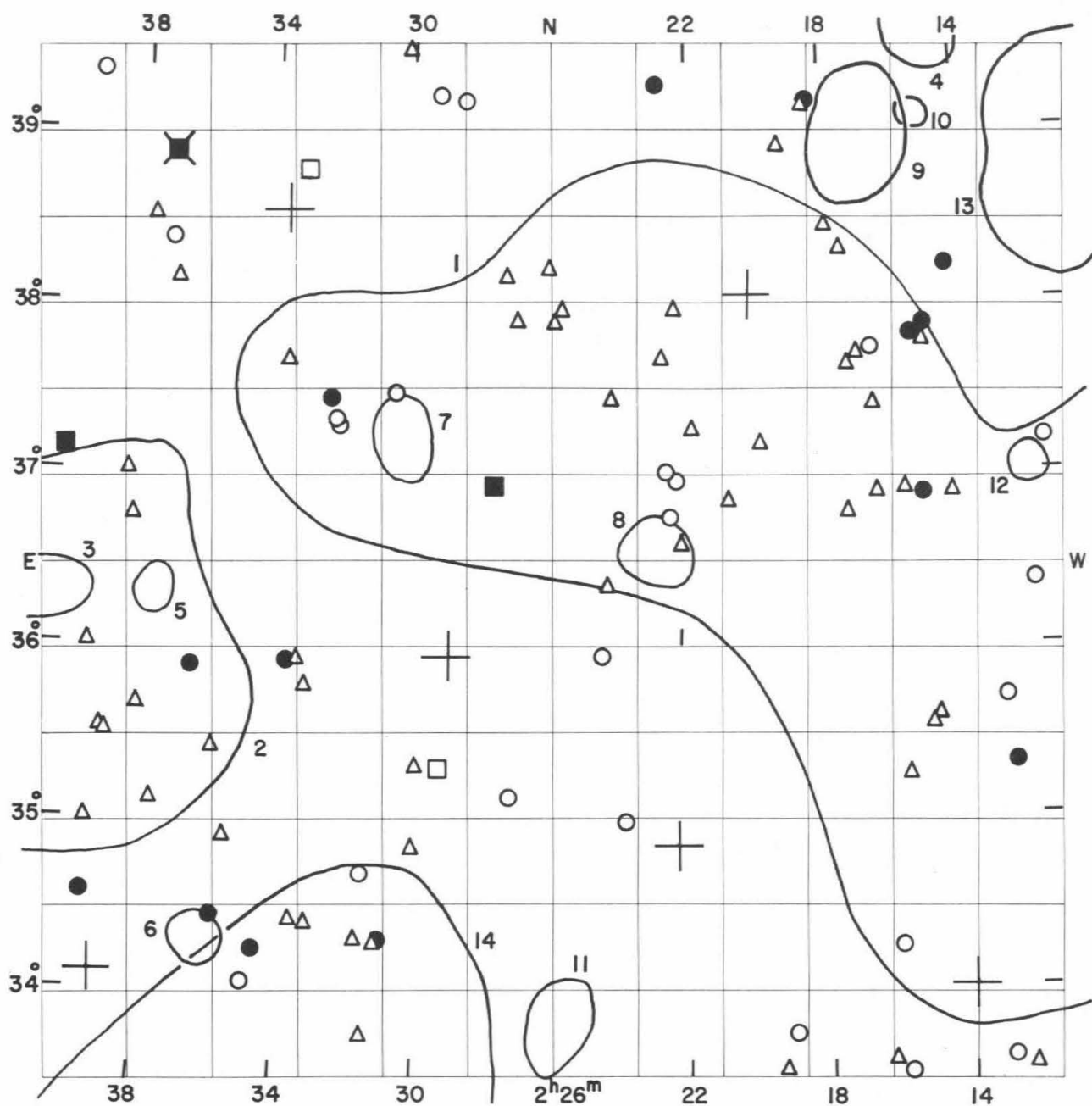
GALAXIES

Position α 1950 δ			NGC IC*	m _p	V _s km/sec	Remarks
h	m	o				
1	43.4	+ 36 12	668	13.5		
1	43.5	+ 34 41		14.7		
1	44.0	+ 34 32		15.2		
1	44.3	+ 35 18	669	12.9		
1	44.6	+ 35 47		15.0		
1	44.8	+ 34 46		15.0		
1	45.2	+ 36 12		15.0		
1	46.1	+ 34 59		15.6		
1	46.2	+ 34 44		15.4		
1	46.3	+ 34 50		14.3		
1	46.4	+ 34 43		15.4		very compact
1	46.4	+ 36 00		15.7		
1	46.5	+ 34 44		15.5		
1	46.5	+ 35 12		14.5		
1	46.8	+ 35 32	679	13.1		
1	47.2	+ 37 06		15.7		
1	47.6	+ 36 07	687	13.3		
1	47.7	+ 35 07		15.7		very diffuse
1	47.8	+ 33 30		15.0		
1	47.8	+ 35 02	688	13.3		
1	47.9	+ 35 40	1732*	15.1		
1	47.9	+ 36 01		14.5		
1	48.4	+ 34 37		15.5		
1	48.5	+ 35 49		14.5		
1	49.1	+ 35 53		15.6		
1	49.2	+ 35 10		15.1		
1	49.2	+ 35 50	700	15.6		
1	49.2	+ 39 08		14.9		
1	49.3	+ 34 55		15.6		double system
1	49.3	+ 35 47		15.5		
1	49.4	+ 35 33		15.2		
1	49.5	+ 35 36		15.0		
1	49.6	+ 35 52		15.7		compact
1	49.7	+ 35 52	704	14.1		double system
1	49.7	+ 36 15		14.0		
1	49.8	+ 35 54	705	14.5		
1	49.8	+ 35 56	703	14.5		

Position				NGC IC*	m_p	V_s km/sec	Remarks
α	1950	δ					
h	m	o	'				
1	49.8	+ 36	22		13.9		
1	49.9	+ 35	55	708	14.8		
1	49.9	+ 35	59	709	15.2		
1	50.0	+ 35	48	710	14.3		
1	50.0	+ 36	15		14.5		
1	50.2	+ 36	34	712	13.9		
1	50.3	+ 36	05		15.7		
1	50.4	+ 35	46		15.6		
1	50.4	+ 36	43		14.4		
1	50.6	+ 35	58	714	13.9		
1	50.9	+ 36	06		15.3		
1	50.9	+ 36	18		15.3		
1	50.9	+ 36	20		15.7		star superposed
1	50.9	+ 36	32		15.1		
1	51.0	+ 35	59	717	14.7		
1	51.0	+ 36	23		15.4		
1	51.3	+ 35	40		15.2		
1	51.4	+ 36	22		14.7		
1	51.8	+ 39	08	721	13.8		
1	51.9	+ 37	17		15.4		
1	52.0	+ 36	41		14.2		
1	52.0	+ 37	05		15.6		
1	52.1	+ 35	11		15.1		
1	52.1	+ 36	38		15.2		
1	52.1	+ 36	41		15.2		
1	52.2	+ 36	01		15.4		
1	52.3	+ 35	02	171*	13.8		
1	52.3	+ 35	13		15.6		
1	52.4	+ 36	03		15.5		
1	52.7	+ 37	09		15.5		
1	52.8	+ 36	48		15.6		
1	53.0	+ 36	53		14.9		
1	53.1	+ 39	25		15.7		
1	53.2	+ 35	53		13.8		star superposed
1	53.4	+ 35	20		15.2		
1	53.4	+ 36	59		15.6		
1	53.4	+ 37	12		15.7		
1	53.4	+ 37	15		15.7		
1	53.5	+ 36	34	732	14.9		
1	53.6	+ 37	05		15.5		
1	53.7	+ 33	56	735	13.9		
1	53.7	+ 35	21		15.3		
1	53.8	+ 36	08		14.5		
1	53.8	+ 36	39		14.9		
1	53.9	+ 35	45		15.3		
1	54.0	+ 35	43		15.7		
1	54.7	+ 36	00		15.4		
1	54.7	+ 37	12		15.6		
1	54.8	+ 35	40	753	12.6	+ 4766	$m_H = 13.0$
1	54.9	+ 36	05	759	13.7		
1	54.9	+ 37	07		15.5		
1	55.0	+ 36	41		15.7		compact
1	55.1	+ 34	03		15.7		
1	55.1	+ 37	20		15.3		
1	55.6	+ 36	15		15.7		
1	55.6	+ 38	29		15.3		
1	56.0	+ 36	26	178*	14.0		
1	56.0	+ 37	30		15.6		
1	56.1	+ 35	49		15.4		

NGC IC*	Position a 1950 δ		m_p	V_s km/sec	Remarks
	h m	o			
	1 56.1	+ 36 01	15.0		
	1 56.4	+ 36 35	15.0		
	1 57.0	+ 36 21	15.4		
	1 57.2	+ 37 21	15.0		
	1 57.2	+ 37 47	13.4		
	1 57.9	+ 37 58	14.0		
	1 58.0	+ 37 40	15.6		
	1 58.0	+ 38 33	15.2		
	2 00.4	+ 37 53	13.1		double nebula
	2 00.7	+ 38 01	13.5		
	2 02.2	+ 37 24	15.7		
	2 02.3	+ 34 34	15.4		
	2 02.5	+ 34 42	15.5		
	2 02.5	+ 37 23	15.7		compact
	2 02.6	+ 34 40	15.2		
	2 04.0	+ 34 40	15.1		
	2 04.3	+ 36 52	15.0		
	2 04.9	+ 34 48	15.7		
	2 05.7	+ 35 41	15.7		compact
	2 05.7	+ 38 32	12.7		
	2 06.1	+ 34 52	15.7		
	2 06.7	+ 35 34	14.9		
	2 06.9	+ 37 57	15.6		
	2 07.0	+ 33 55	15.7		
	2 07.0	+ 34 43	15.4		
	2 07.0	+ 35 29	14.9		
	2 07.0	+ 36 47	15.6		
	2 07.1	+ 36 28	15.1		
	2 07.1	+ 38 57	13.0		peculiar
	2 07.2	+ 38 21	15.4		
	2 07.8	+ 34 59	15.7		peculiar
	2 08.0	+ 37 26	13.2		
	2 08.0	+ 37 35	15.2		
	2 08.1	+ 38 31	15.1		
	2 08.3	+ 37 16	12.8		
	2 08.5	+ 34 36	15.6		
	2 08.7	+ 33 49	14.9		
	2 09.1	+ 39 00	14.6		
	2 09.3	+ 37 15	14.5		
	2 09.8	+ 36 05	15.0		
	2 09.8	+ 37 35	15.7		
	2 10.7	+ 36 05	15.7		diffuse
	2 11.1	+ 35 30	15.5		compact
	2 11.5	+ 37 10	14.5		
	2 11.9	+ 36 20	14.9		
	2 12.3	+ 33 32	15.3		
	2 12.6	+ 35 17	14.0		

MAGNITUDES AND TYPES FROM OTHER SOURCES								
NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
721	-	-	14.23	SBb	-	-	-	-
753	-	-	12.91	Sc	12.9	Sc	12.91	Sc-



FIELD No. 523

$2^{\text{h}} 26^{\text{m}} + 36^{\circ} 30'$

Survey Plate No. 407

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	°	'	"	
2733	2	13	59.6	+	33	59 48	5.07
2860	2	20	13.2	+	38	01 33	7.08
2909	2	22	25.5	+	34	49 00	6.92
3032	2	29	02.5	+	35	55 36	5.35
3132	2	33	49.3	+	38	31 07	5.94
3248	2	39	15.3	+	34	04 54	7.05

CLUSTERS OF GALAXIES

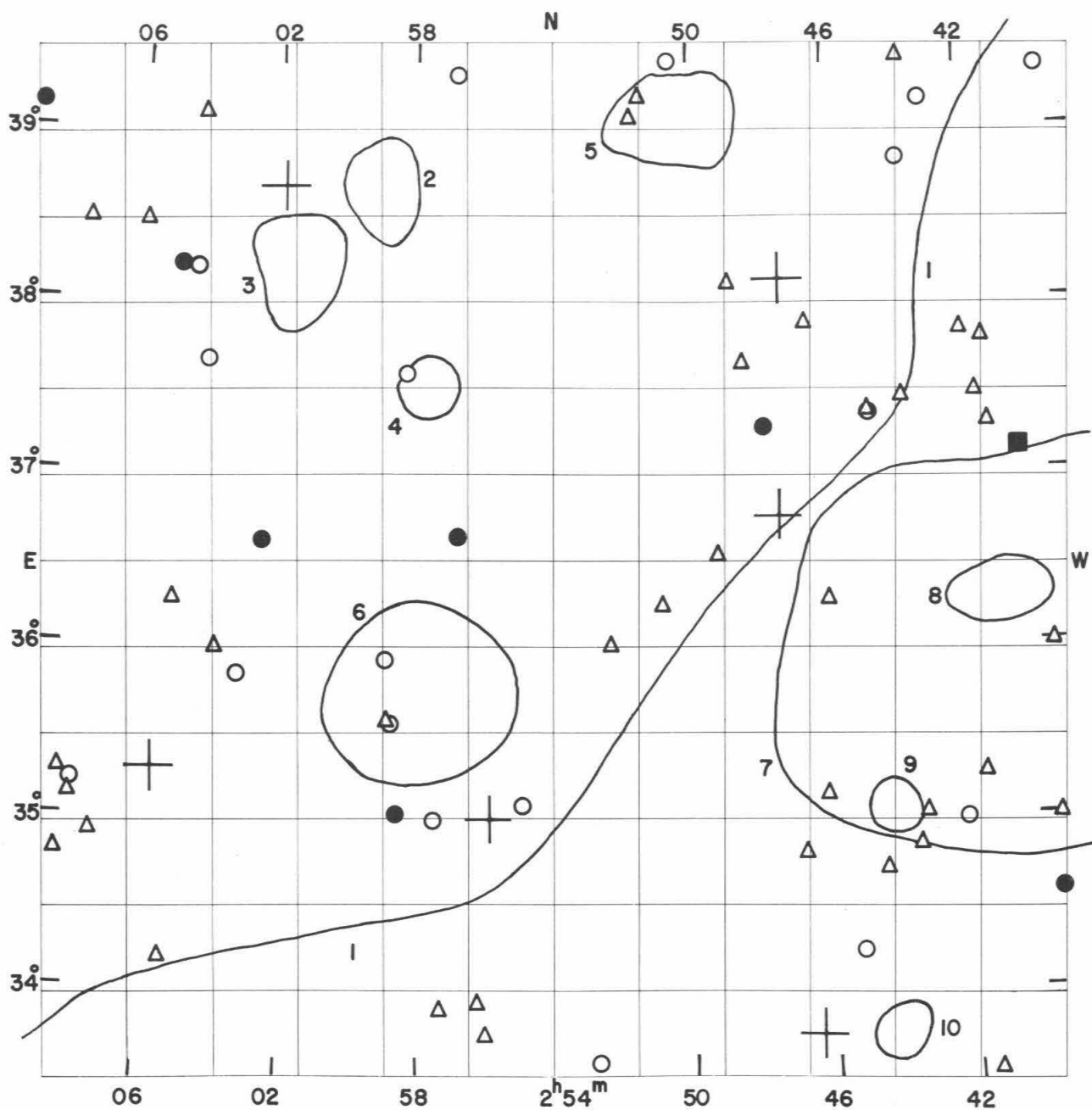
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0210.0 + 3852	medium compact	173	7.0	MD	13
0212.0 + 3701	compact	57	1.2	VD	12
0214.9 + 3935	medium compact	105	2.4	VD	4
0215.2 + 3905	compact	55	1.0	ED	10
0216.0 + 3625	medium compact	485	24.1	Near	1
0216.8 + 3857	medium compact	84	3.7	D	9
0222.9 + 3633	medium compact	79	2.2	VD	8
0225.8 + 3347	open	74	2.5	ED	11
0230.3 + 3711	medium compact	63	2.2	VD	7
0236.2 + 3249	medium compact	211	18.0	Near	14
0236.2 + 3417	medium compact	81	1.6	ED	6
0237.6 + 3618	compact	59	1.3	ED	5
0241.0 + 3617	compact	74	2.5	VD	3
0241.2 + 3558	medium compact	313	13.5	Near	2

Average number of galaxies per cluster = 136.6

GALAXIES

Position a 1950 δ h m o			NGC IC*	m_p	V_s km/sec	Remarks
2 11.5	+ 37	10		14.5		
2 11.9	+ 36	20		14.9		
2 12.3	+ 33	32		15.3		
2 12.6	+ 35	17		14.0		
2 12.8	+ 35	41	861	14.8		
2 12.9	+ 33	35		14.7		
2 14.3	+ 36	52		15.1		
2 14.3	+ 38	11		13.6		
2 14.8	+ 35	35		15.2		
2 15.0	+ 35	32		15.4		
2 15.1	+ 37	45		15.7		
2 15.1	+ 37	51		14.0		
2 15.2	+ 36	51		13.9		
2 15.4	+ 37	48		13.7		
2 15.7	+ 35	14		15.3		
2 15.7	+ 36	54		15.5		
2 15.8	+ 33	30		14.6		
2 16.0	+ 34	15	1792*	15.0		compact
2 16.3	+ 33	35		15.6		
2 16.5	+ 36	53		15.6		compact
2 16.6	+ 37	24		15.7		
2 16.6	+ 37	43		14.7		
2 17.0	+ 37	41		15.7		
2 17.3	+ 37	38		15.1		
2 17.4	+ 36	46		15.7		compact
2 17.4	+ 38	18		15.6		
2 17.9	+ 38	26		15.5		
2 18.4	+ 39	09		13.7		tidal effects
2 18.5	+ 39	08		15.3		
2 19.1	+ 33	43		14.6		
2 19.3	+ 33	31		15.7		
2 19.3	+ 38	54		15.2		
2 19.9	+ 37	10		15.7		
2 20.9	+ 36	50		15.6		compact

Position a 1950 δ h m o			NGC IC*	m_p	V_s km/sec	Remarks
2 21.9	+ 37	15		15.7		
2 22.2	+ 36	35		15.7		
2 22.4	+ 36	57		15.0		
2 22.4	+ 37	57		15.6		
2 22.6	+ 36	45		15.0		
2 22.7	+ 37	00		14.9		
2 22.8	+ 37	40		15.7		
2 22.9	+ 39	15		13.1		
2 23.9	+ 34	58		14.9		
2 24.3	+ 37	25		15.7		
2 24.4	+ 36	21		15.7		compact
2 24.6	+ 35	56		15.0		
2 25.7	+ 37	57		15.2		
2 25.9	+ 37	53		15.5		
2 26.1	+ 38	10		15.5		
2 27.0	+ 37	53		15.7		very compact
2 27.3	+ 35	07		15.0		
2 27.3	+ 38	09		15.5		
2 27.8	+ 36	55	949	12.0		$m_H = 12.8$ Sb
2 28.5	+ 39	10		14.3		
2 29.3	+ 35	17	959	12.5		
2 29.3	+ 39	12		15.0		
2 30.0	+ 35	18		15.6		
2 30.1	+ 34	49		15.7		
2 30.2	+ 39	28		15.4		
2 30.6	+ 37	27		14.7		
2 31.1	+ 34	16	968	13.8		
2 31.2	+ 34	15		15.6		star superposed
2 31.5	+ 33	44		15.3		
2 31.6	+ 34	40		15.0		
2 31.8	+ 34	17		15.7		
2 32.3	+ 37	16		14.6		
2 32.4	+ 37	18		14.8		
2 32.5	+ 37	25		13.2		
2 33.1	+ 34	23		15.5		
2 33.2	+ 35	45		15.7		
2 33.3	+ 38	45	239*	12.1		
2 33.4	+ 35	55		15.7		
2 33.6	+ 34	24		15.4		
2 33.8	+ 35	54		13.8		
2 33.8	+ 37	40		15.5		
2 34.6	+ 34	14		13.9	+ 4800	*)
2 34.9	+ 34	02		14.5		
2 35.5	+ 34	53		15.7		compact
2 35.9	+ 34	25	1002	14.0		
2 35.9	+ 35	23		15.5		
2 36.5	+ 35	52		14.0		
2 37.1	+ 38	08		15.6		
2 37.2	+ 38	51	1023	10.5	+ 578	$m_H = 11.2$ SBa
2 37.3	+ 38	21		14.9		
2 37.6	+ 35	06		15.7		
2 37.8	+ 38	30		15.7		double system
2 38.1	+ 35	39		15.7		
2 38.3	+ 36	45		15.4		
2 38.5	+ 37	01		15.5		
2 39.0	+ 35	30		15.5		
2 39.1	+ 35	32		15.7		
2 39.5	+ 34	34	1050	13.5		
2 39.5	+ 35	00		15.1		



FIELD No. 524

$2^{\text{h}}54^{\text{m}} + 36^{\circ}30'$

Survey Plate No. 1307

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	o	'	"	
3376	2	46	23.0	+	33	43 46	7.15
3401	2	47	25.1	+	38	06 51	4.27
3402	2	47	28.0	+	36	44 38	6.63
3575	2	55	57.3	+	34	59 03	4.97
3682	3	01	57.8	+	38	38 53	Var.
3745	3	05	37.5	+	35	16 07	7.57

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0241.0 + 3617	compact	74	2.5	VD	8
0241.2 + 3558	medium compact	313	13.5	Near	7
0244.2 + 3344	compact	94	1.7	ED	10
0244.2 + 3503	compact	54	1.6	VD	9
0250.3 + 3903	medium compact	72	3.5	D	5
0257.7 + 3729	compact	63	1.9	VD	4
0257.8 + 3542	compact	125	5.8	MD	6
0259.0 + 3838	medium compact	77	2.7	D	2
0301.6 + 3809	medium compact	83	3.2	D	3
0303.0 + 4125	medium compact	5130	77.1	Near	1 *)

Average number of galaxies per cluster = 608.5

*) Cluster No. 1 contains the conventional Perseus Cluster as one of its condensations. See special map on page 244.

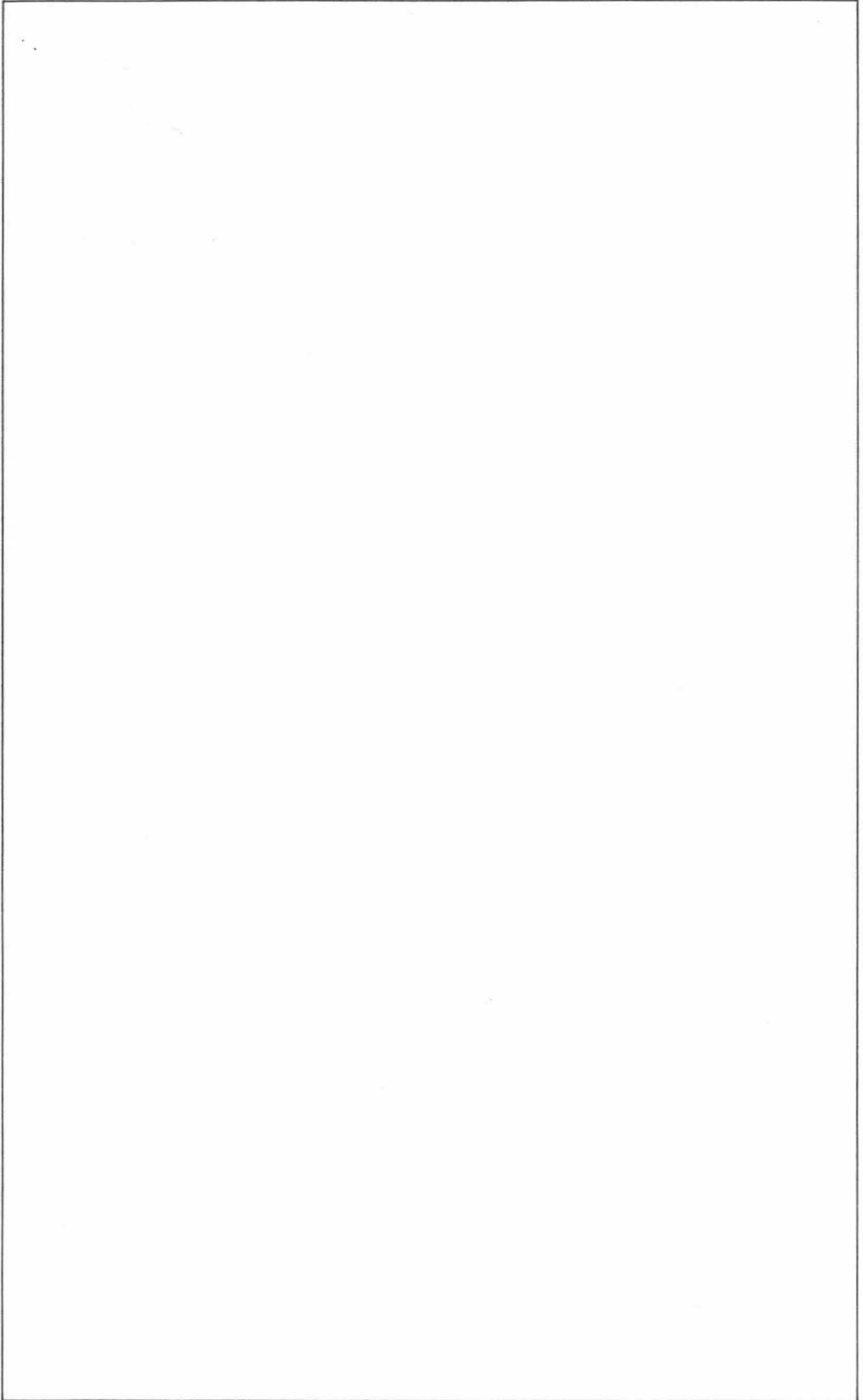
GALAXIES

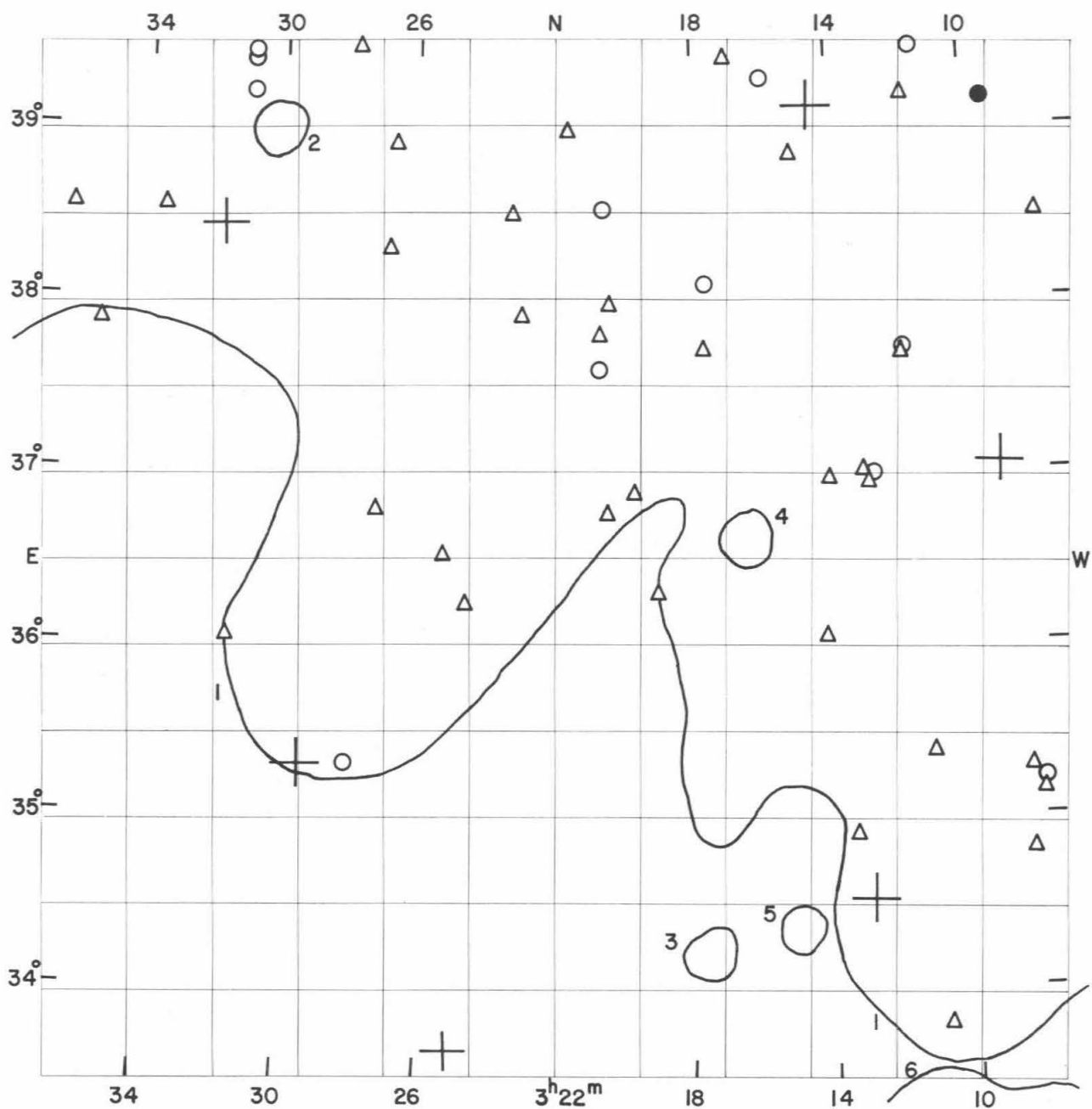
Position α 1950 δ	NGC IC*	m _p	V _s km/sec	Remarks
h m o s				
2 39.5 + 34 34	1050	13.5		
2 39.5 + 35 00		15.1		
2 39.5 + 36 00		15.7		compact
2 39.5 + 39 20		14.6		
2 40.3 + 37 08	1058	11.8	+ 480	m _H = 12.7 S
2 41.3 + 37 17		15.7		compact
2 41.4 + 33 31		15.4		
2 41.4 + 37 47		15.7		
2 41.6 + 35 15		15.7		
2 41.7 + 37 27		15.7		
2 42.0 + 37 50		15.6		
2 42.1 + 34 59		14.8		
2 43.1 + 39 10		15.0		
2 43.3 + 35 01		15.5		
2 43.5 + 34 50		15.2		
2 43.8 + 37 25		15.7		
2 43.8 + 38 49		14.9		
2 43.8 + 39 25		15.4		double system
2 44.5 + 34 42		15.6		
2 44.8 + 37 20		14.3		diffuse spiral
2 44.8 + 37 22		15.6		very compact
2 45.2 + 34 13	1093	14.3		
2 46.0 + 36 15		15.4		
2 46.1 + 35 08		15.5		
2 46.6 + 37 51		15.5		
2 46.8 + 34 47		15.4		
2 47.9 + 37 15		13.8		
2 48.4 + 37 38		15.5		
2 48.8 + 38 06		15.6		
2 49.2 + 36 32		15.4		very compact
2 50.6 + 39 23		14.6		compact
2 50.9 + 36 13		15.7		
2 51.5 + 39 11		15.6		
2 51.8 + 39 03		15.6		
2 52.3 + 36 00		15.6		
2 52.7 + 33 35		15.0		

Position a 1950 δ h m o ' ,			NGC IC*	m _p	V _s km/sec	Remarks
2 54.9	+ 35	04		14.6		diffuse spiral
2 56.0	+ 33	43		15.6		double system
2 56.2	+ 33	55		15.7		
2 56.8	+ 36	37		13.8		
2 56.8	+ 39	18		14.8		very compact
2 57.2	+ 33	53		15.7		
2 57.5	+ 34	59		14.7		
2 58.3	+ 37	35	278*	14.8		compact
2 58.6	+ 35	01	1167	14.0		
2 58.8	+ 35	33		14.8		
2 58.9	+ 35	35		15.5		double system
2 58.9	+ 35	55		14.7		
3 02.6	+ 36	35		13.5		
3 03.2	+ 35	50	1874*	14.8		
3 03.9	+ 35	59		15.7		
3 04.2	+ 37	39		14.9		
3 04.3	+ 39	05		15.6		
3 04.5	+ 38	10		14.9		
3 05.0	+ 38	11	1207	13.7		
3 05.1	+ 36	15		15.1		very diffuse
3 05.2	+ 34	11		15.7		
3 06.0	+ 38	27	1213≡1881*	15.7		very diffuse
3 07.4	+ 34	55		15.4		
3 07.8	+ 38	28		15.6		
3 07.9	+ 35	12	1226	14.5		
3 08.0	+ 35	08	1227	15.7		
3 08.3	+ 34	48		15.7		compact
3 08.3	+ 35	17		15.7		
3 09.3	+ 39	08	1233	13.9		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
1058	-	-	12.21	Sc	11.9	Sc	11.74	Sc-





FIELD No. 525

$3^{\text{h}}22^{\text{m}}$ + $36^{\circ}30'$

Survey Plate No. 1333

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	°	'	"	
3813	3	08	58.5	+	37	01 50	7.43
3888	3	12	53.4	+	34	30 19	6.42
3927	3	14	30.8	+	39	06 04	5.97
4120	3	25	11.9	+	33	38 09	5.60
4222	3	29	28.6	+	35	17 36	5.80
4262	3	31	49.7	+	38	25 12	6.99

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0303.0 + 4125	medium compact	5130	77.1	Near	1 *)
0309.8 + 3305	medium compact	154	6.0	D	6
0315.0 + 3419	compact	66	1.4	ED	5
0316.4 + 3636	compact	108	1.6	VD	4
0317.6 + 3411	compact	52	1.7	VD	3
0330.3 + 3859	compact	69	1.7	VD	2

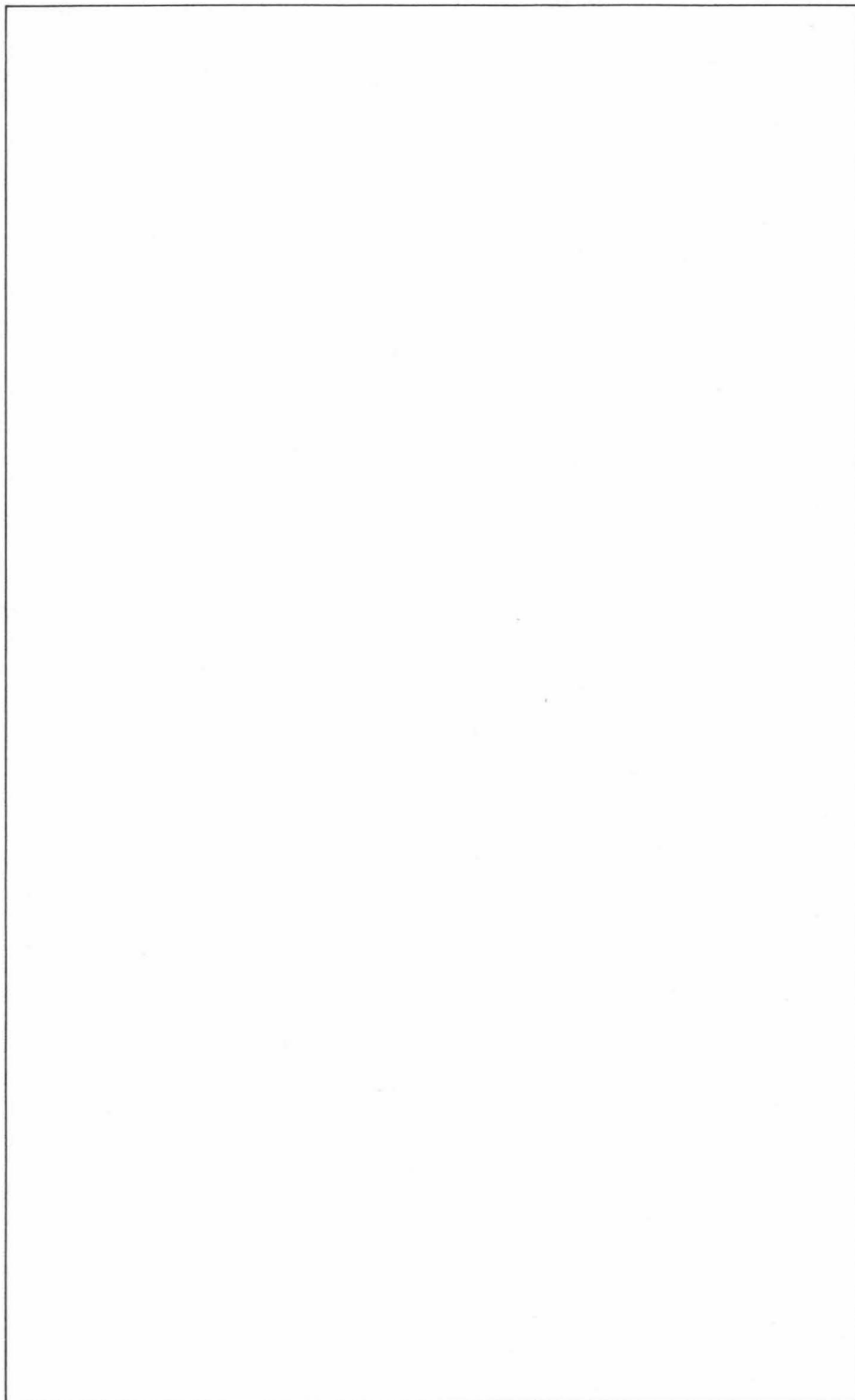
Average number of galaxies per cluster = 929.8

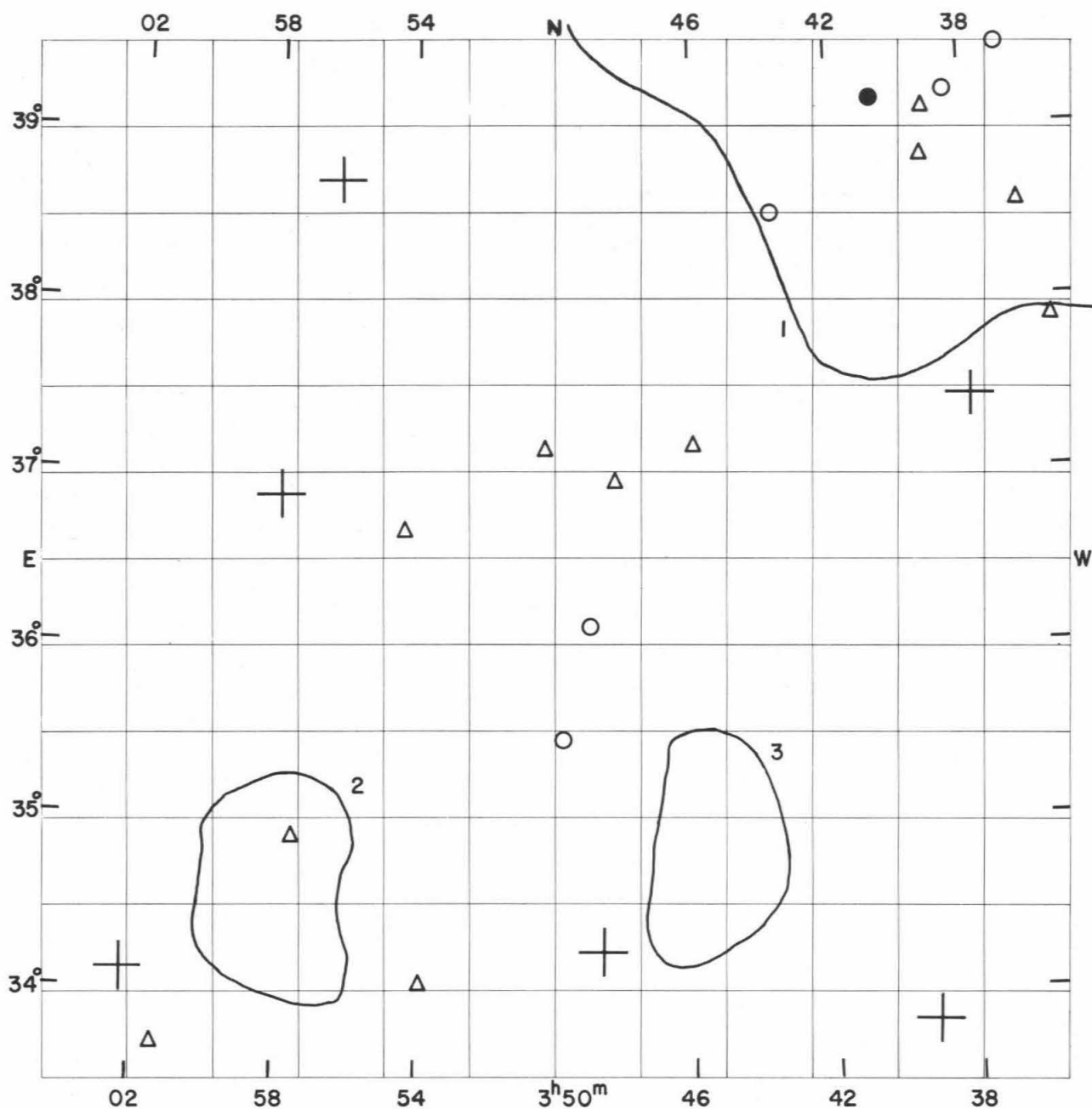
*) Cluster No. 1 contains the conventional Perseus Cluster as one of its condensations. See special map on page 244.

GALAXIES

Position			NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ				
h	m	o				
3	07.8	+ 38 28		15.6		
3	07.9	+ 35 12	1226	14.5		
3	08.0	+ 35 08	1227	15.7		
3	08.3	+ 34 48		15.7		compact
3	08.3	+ 35 17		15.7		
3	09.3	+ 39 08	1233	13.9		
3	10.8	+ 33 47		15.7		
3	11.1	+ 35 21		15.6		
3	11.5	+ 39 27		14.8		
3	11.8	+ 37 43	304*	14.8		
3	11.8	+ 39 11		15.7		
3	11.9	+ 37 41	305*	15.7		compact
3	12.8	+ 36 59	1900*	15.0		
3	12.9	+ 36 56	1901*	15.6		
3	13.0	+ 37 00	1902*	15.7		
3	13.3	+ 34 53		15.7		extremely diffuse
3	14.0	+ 36 57		15.5		
3	14.2	+ 36 02		15.7		
3	15.1	+ 38 50		15.7		
3	16.0	+ 39 17		14.7		
3	17.0	+ 39 23		15.5		
3	17.7	+ 37 41		15.4		
3	17.7	+ 38 05		14.8		
3	19.0	+ 36 17		15.6		
3	19.7	+ 36 51		15.5		extremely diffuse
3	20.4	+ 37 57		15.6		
3	20.5	+ 36 45		15.7		
3	20.7	+ 37 47		15.7		
3	20.7	+ 38 30		14.8		
3	20.8	+ 37 35		15.0		
3	21.7	+ 38 57		15.5		
3	23.0	+ 37 54		15.5		
3	23.3	+ 38 30		15.6		
3	24.7	+ 36 13		15.5		
3	25.3	+ 36 31		15.5		double system
3	26.7	+ 38 54		15.7		
3	26.9	+ 38 17		15.4		
3	27.2	+ 36 47		15.6		
3	27.9	+ 39 28		15.4		
3	28.1	+ 35 18		14.9		

Position			NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ				
h	m	o				
3	31.0	+ 39 12		14.2		
3	31.0	+ 39 23		14.3		compact
3	31.0	+ 39 26		15.0		
3	31.6	+ 36 03		15.7		
3	33.6	+ 38 32		15.7		
3	35.4	+ 37 52		15.7		
3	36.3	+ 38 32		15.2		





FIELD No. 526
 $3^{\text{h}}50^{\text{m}} + 36^{\circ}30'$

Survey Plate No. 1302

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	°	'	"	
4387	3	37	52.1	+	37	25 13	5.57
4420	3	39	12.0	+	33	48 22	5.04
4649	3	48	41.6	+	34	12 35	5.73
4784	3	56	20.1	+	38	40 45	6.38
4809	3	57	57.7	+	36	51 00	6.33
4915	4	02	22.5	+	34	06 18	6.61

CLUSTERS OF GALAXIES

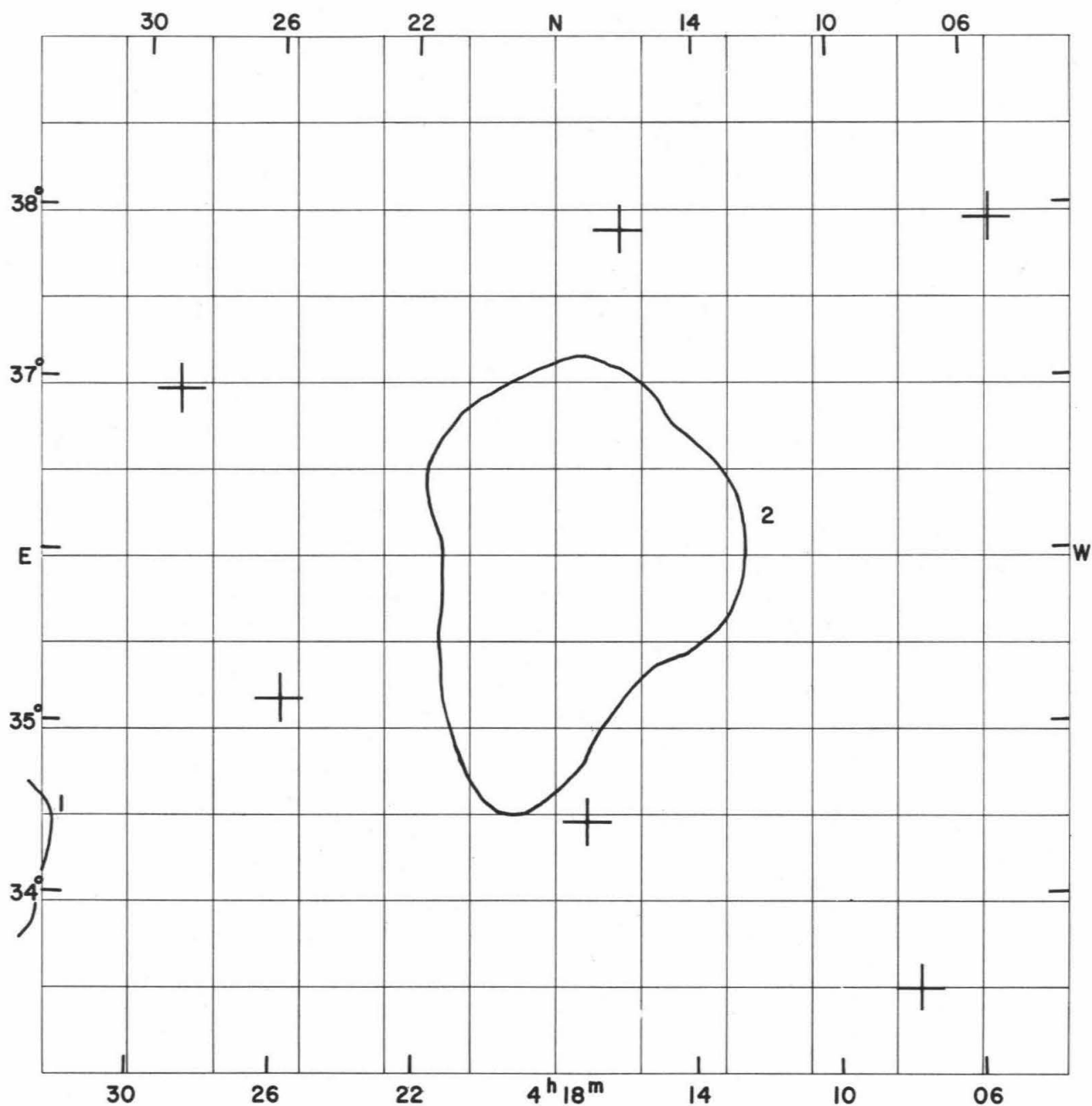
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0303.0 + 4125	medium compact	5130	77.1	Near	1 *)
0345.5 + 3448	medium compact	93	5.6	D	3
0357.9 + 3432	open	108	6.1	MD	2

Average number of galaxies per cluster = 1777.0

*) Cluster No. 1 contains the conventional Perseus Cluster as one of its condensations. See special map on page 244.

GALAXIES

Position a 1950 δ h m o t			NGC IC*	m_p	V_s km/sec	Remarks
3 35.4	+ 37	52		15.7		
3 36.3	+ 38	32		15.2		
3 36.8	+ 39	27		15.0		
3 38.4	+ 39	11		14.5		
3 39.1	+ 39	05		15.3		
3 39.2	+ 38	48		15.2		
3 40.6	+ 39	09		13.8		
3 43.7	+ 38	29		15.0		
3 46.0	+ 37	08		15.6		
3 48.3	+ 36	56		15.7		
3 49.0	+ 36	05		15.0		
3 49.8	+ 35	27		14.4		
3 50.3	+ 37	06		15.7		diffuse
3 53.9	+ 34	01		15.7		
3 54.3	+ 36	39	2005*	15.7		compact
3 57.5	+ 34	53		15.3		
4 01.4	+ 33	40		15.2		



FIELD No. 527

$4^{\text{h}}18^{\text{m}}$ + $36^{\circ}00'$

Survey Plate No. 1458

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	°	'	"	
4973	4	05	16.3	+	37	54 39	5.59
5018	4	07	46.1	+	33	27 28	5.91
5203	4	16	09.6	+	37	52 42	7.34
5235	4	17	09.5	+	34	26 52	5.10
5440	4	25	55.2	+	35	09 25	7.47
5515	4	28	56.8	+	36	56 15	6.82

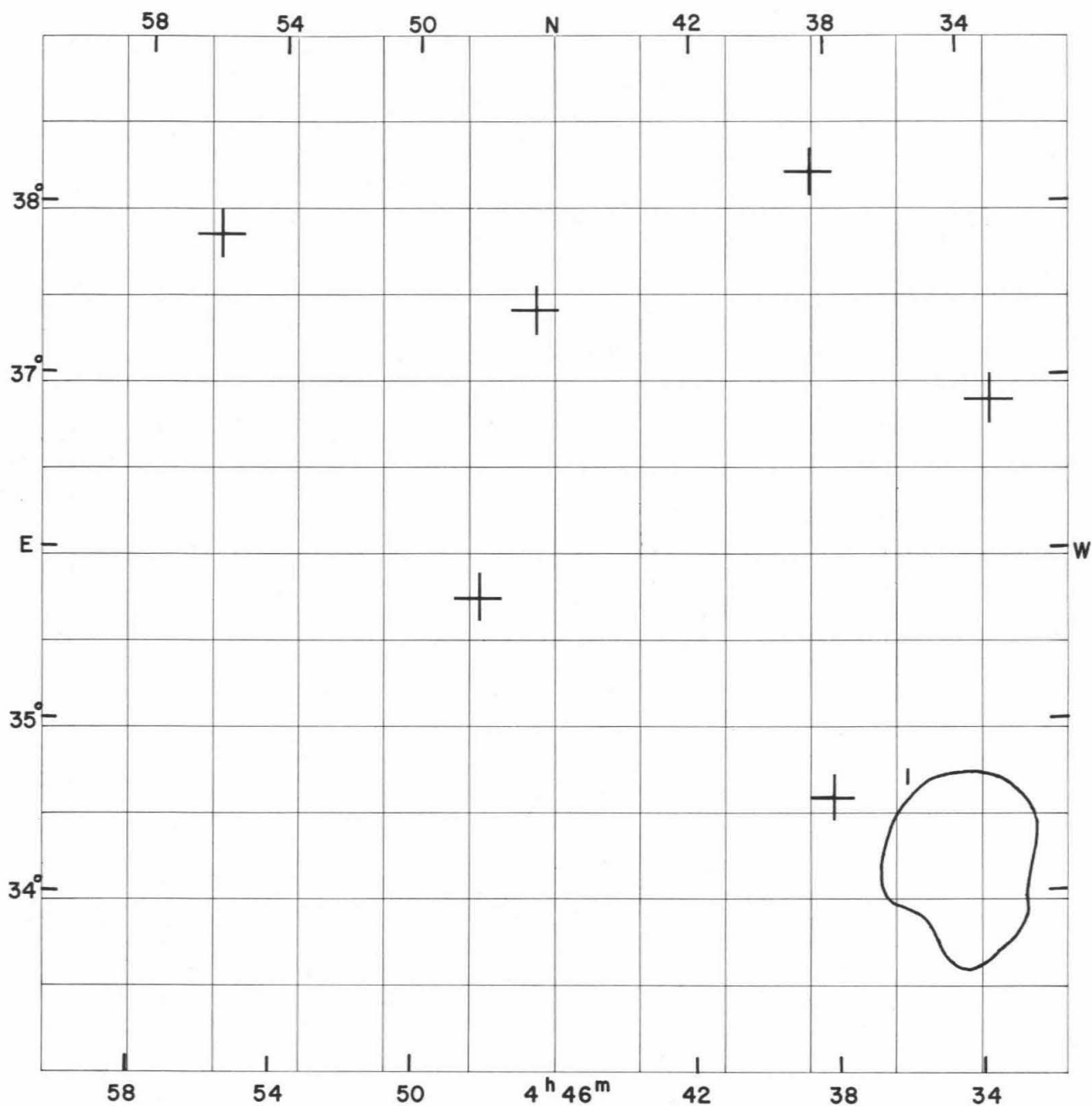
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0417.7 + 3557	open	131	11.2	Near	2
0434.4 + 3412	open	97	5.3	MD	1

Average number of galaxies per cluster = 114.0

GALAXIES

No galaxies in this field



FIELD No. 528

$4^{\text{h}}46^{\text{m}} + 36^{\circ}00'$

Survey Plate No. 1469

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	o	'	"	
5610	4	33	17.5	+	36	51 09	6.72
5691	4	38	03.4	+	34	34 14	7.96
5701	4	38	26.0	+	38	11 11	5.82
5868	4	46	32.4	+	37	24 07	5.10
5904	4	48	09.8	+	35	43 59	6.77
6064	4	55	51.5	+	37	49 00	4.99

CLUSTERS OF GALAXIES

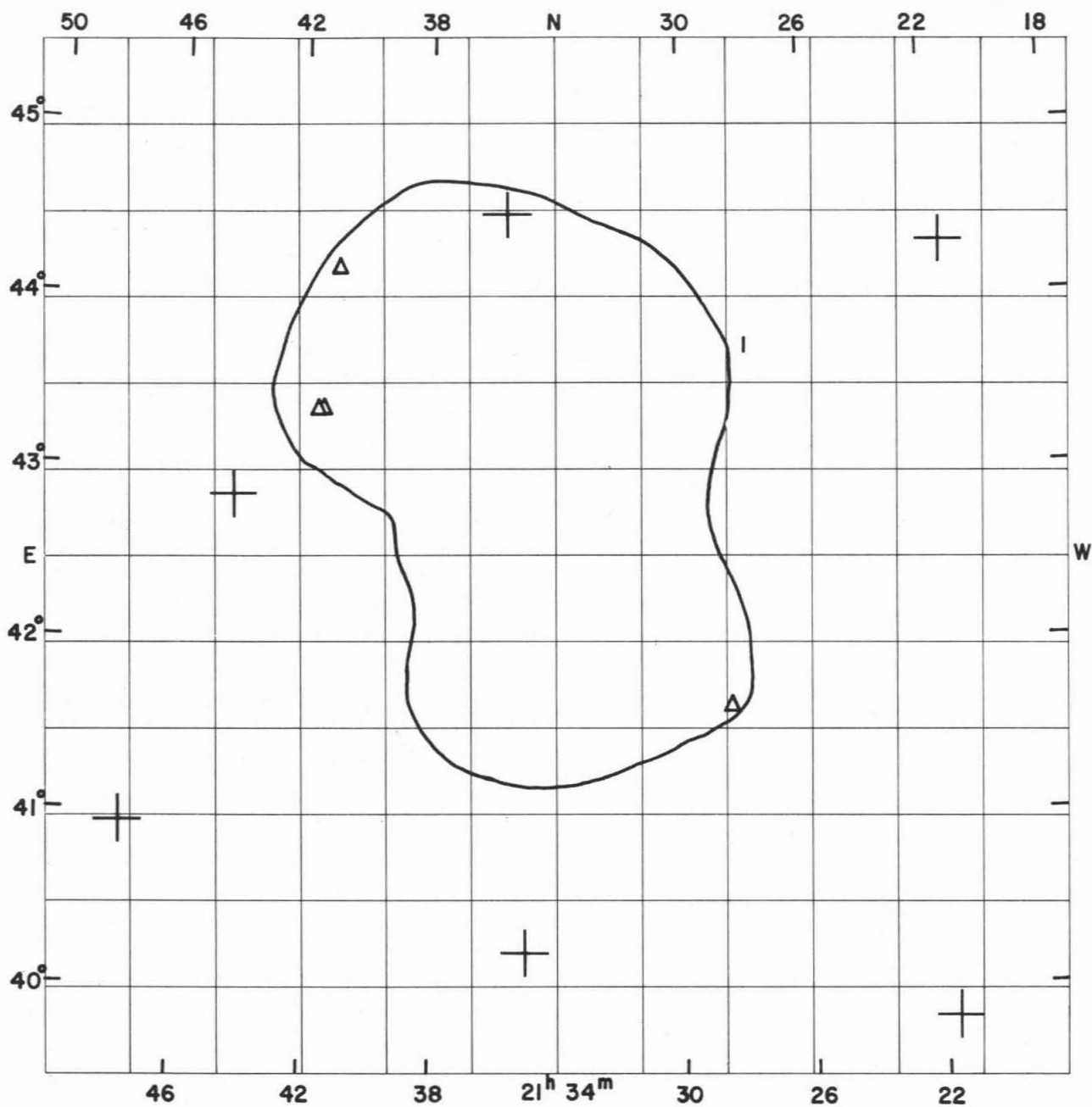
Cluster	Character	Population	Diameter in cm.	Distance	Number on chart
0434.4 + 3412	open	97	5.3	MD	1 *)

Average number of galaxies per cluster = 97.0

*) "Very heavily obscured".

GALAXIES

No galaxies in this field



FIELD No. 529
 21^h34^m + 42°30'
 Survey Plate No. 806

GC STARS

Nos.	R.A.			Decl.			m _p
	h	m	s	o	i	"	
29959	21	21	28.6	+	44	18 11	7.04
29963	21	21	37.1	+	39	48 12	7.17
30263	21	34	56.5	+	40	11 17	5.09
30278	21	35	32.7	+	44	28 17	6.11
30492	21	44	17.2	+	42	49 44	6.43
30566	21	47	37.8	+	40	54 54	6.49

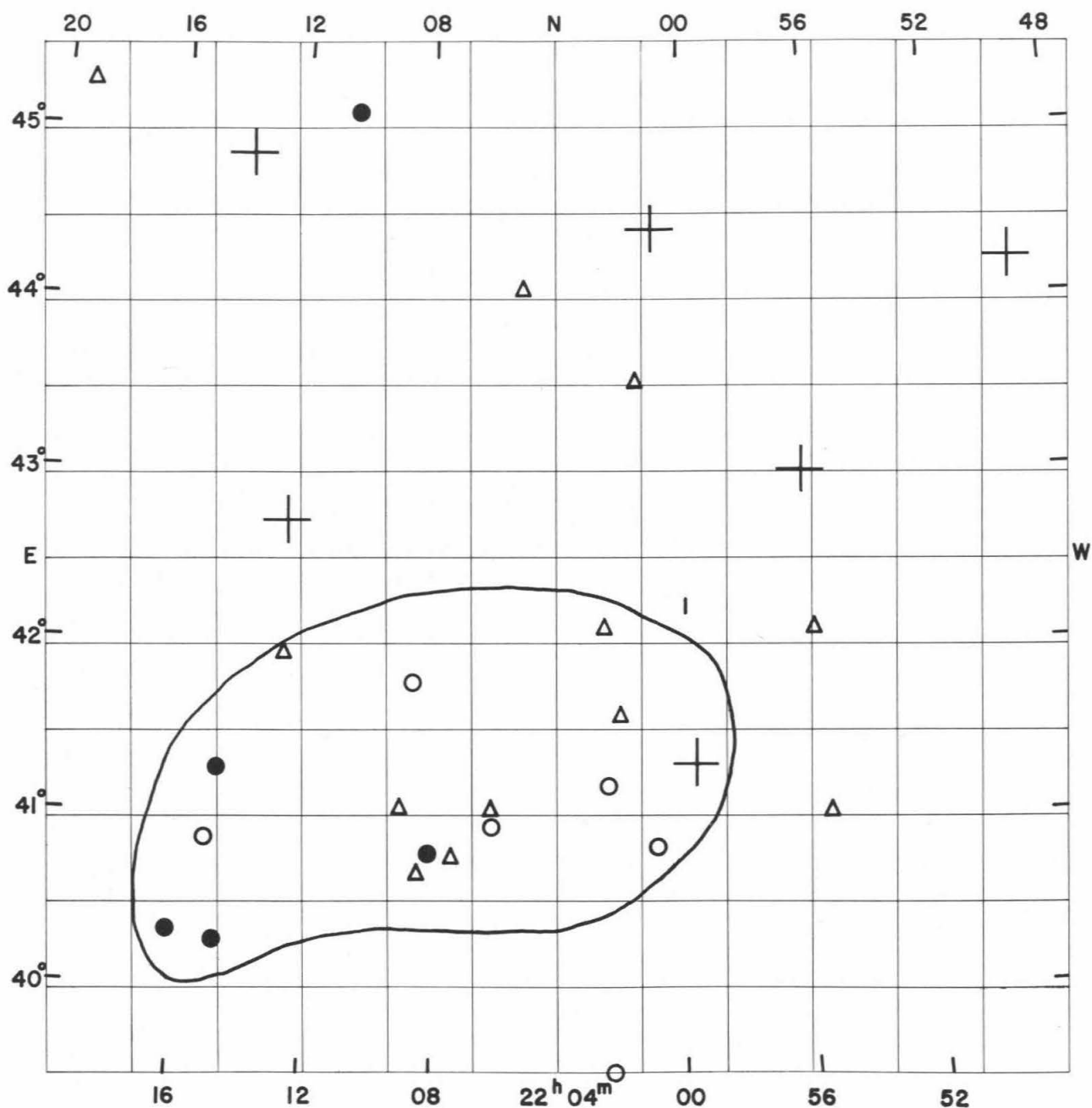
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
2134.6 + 4253	open	95	16.2	Near	1

Average number of galaxies per cluster = 95.0

GALAXIES

Position				NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ					
h	m	o	'				
21	28.4	+ 41	38		15.7		
21	41.0	+ 44	09		15.7		compact
21	41.5	+ 43	19		15.2		double system, bridge
21	41.6	+ 43	18		15.3		



FIELD No. 530
 $22^{\text{h}}04^{\text{m}} + 42^{\circ}30'$
 Survey Plate No. 580

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	o	'	"	
30595	21	49	13.4	+	44	12 21	7.58
30750	21	56	09.3	+	42	59 58	7.38
30820	21	59	38.5	+	41	17 51	7.21
30848	22	00	55.4	+	44	24 29	5.52
31127	22	12	38.1	+	42	42 19	5.70
31145	22	13	56.6	+	44	50 12	7.12

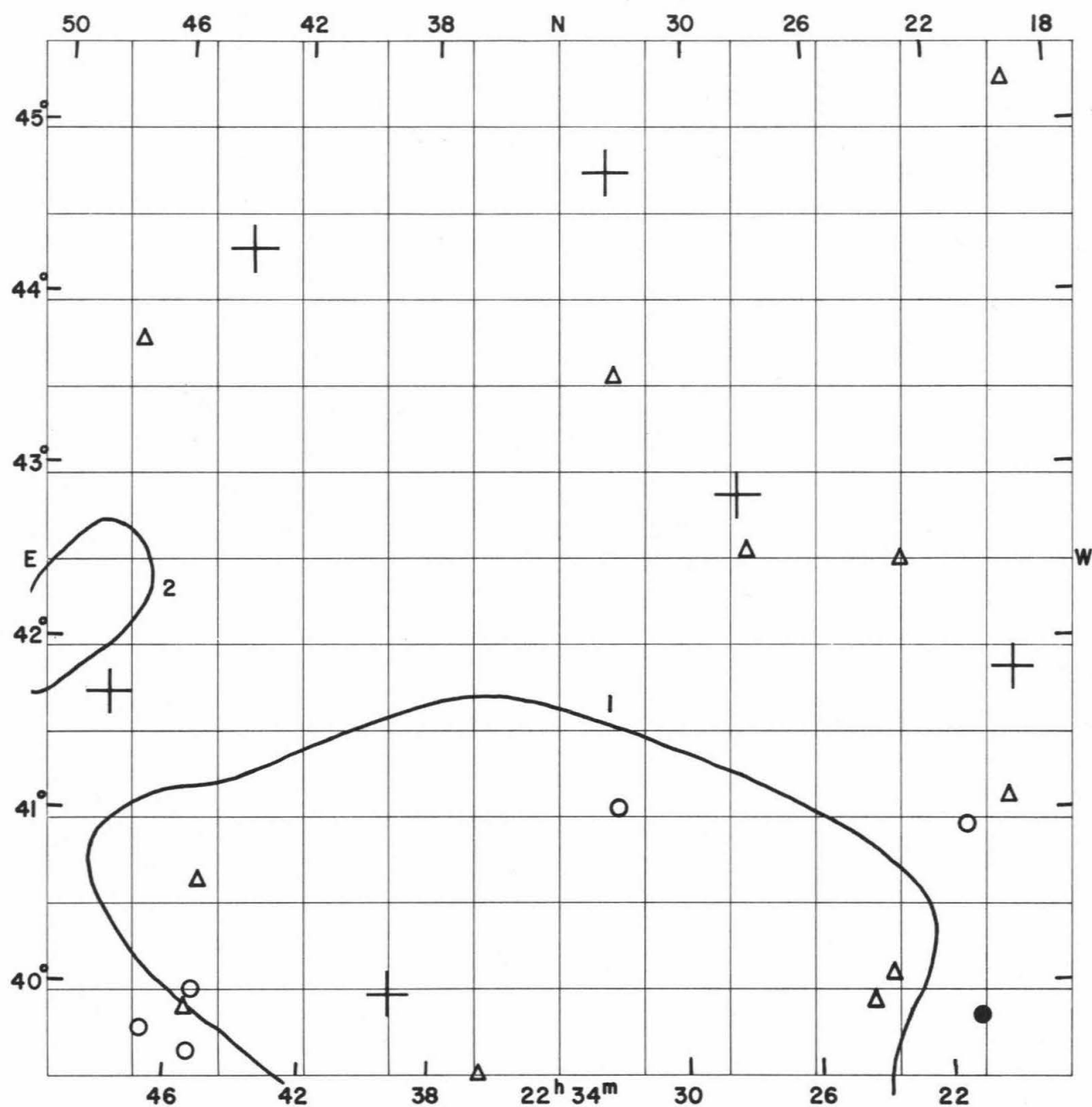
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
2207.8 + 4114	open	135	14.7	Near	1

Average number of galaxies per cluster = 135.0

GALAXIES

Position a 1950 δ h m o			NGC IC*	m_p	V_s km/sec	Remarks
21 55.4	+ 41	00		15.1		
21 55.9	+ 42	03		15.7		extremely diffuse spiral
22 00.9	+ 40	49	7197	14.5		
22 01.5	+ 43	30		15.5		partially resolved dwarf
22 02.0	+ 41	35		15.7		
22 02.2	+ 39	30		14.8		
22 02.4	+ 41	10		14.3		
22 02.5	+ 42	05		15.7		
22 05.1	+ 44	03		15.7		compact
22 06.1	+ 40	56		14.8		
22 06.1	+ 41	02		15.6		
22 07.3	+ 40	45		15.4		
22 08.0	+ 40	46	7223	13.5		
22 08.4	+ 40	39		15.1		
22 08.5	+ 41	47		15.0		compact
22 08.9	+ 41	03		15.3		
22 10.4	+ 45	05	7231	14.0		
22 12.6	+ 41	56		15.7		
22 14.7	+ 40	15	7248	13.6		
22 14.7	+ 41	15		13.5		
22 15.0	+ 40	51		15.0		extremely compact
22 16.1	+ 40	19	7250	13.1		
22 19.3	+ 45	15		15.5		compact



FIELD No. 531
 22^h34^m + 42°30'
 Survey Plate No. 537

GC STARS

Nos.	R.A.			Decl.			m _p
	h	m	s	°	'	"	
31274	22	19	42.2	+	41	49 32	6.27
31449	22	28	19.5	+	42	52 00	4.54
31525	22	32	27.8	+	44	44 46	7.28
31670	22	39	14.0	+	39	57 50	5.18
31771	22	43	56.8	+	44	16 55	5.84
31861	22	48	06.1	+	41	41 18	5.84

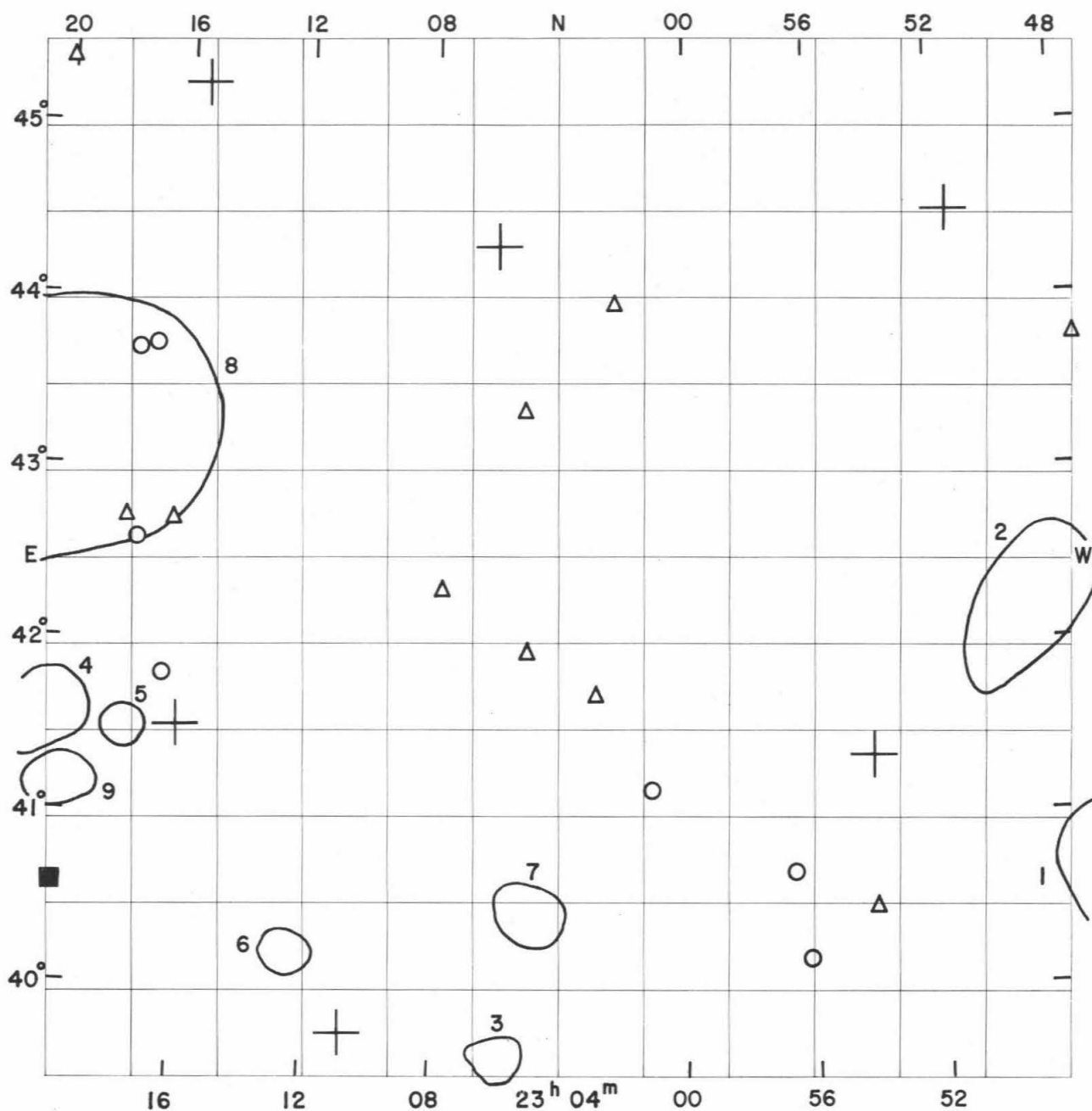
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
2231.2 + 3732	open	782	31.8	Near	1
2249.1 + 4211	open	83	4.4	D	2

Average number of galaxies per cluster = 432.5

GALAXIES

Position			NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ				
h	m	o				
22	19.3	+45 15		15.5		compact
22	20.0	+41 05		15.7		star superposed
22	21.1	+39 48		14.0		compact
22	21.3	+40 55		15.0		compact
22	23.2	+42 27		15.3		
22	23.8	+40 03	7282	15.3		diffuse
22	24.3	+39 54		15.6		
22	28.1	+42 32		15.2		compact
22	32.1	+41 03		14.8		
22	32.2	+43 32		15.2		
22	36.4	+39 30		15.7		compact
22	45.1	+40 36		15.1		
22	45.2	+39 58	7379	14.4		
22	45.3	+39 37		14.4		double nebula
22	45.5	+39 51		15.7		
22	46.8	+39 44		14.5		
22	47.4	+43 44		15.6		



FIELD No. 532
 23^h 04^m + 42° 30'
 Survey Plate No. 876

GC STARS

Nos.	R.A.			Decl.			m _p
	h	m	s	°	'	"	
31930	22	51	25.5	+	44	28 58	5.62
31987	22	54	06.3	+	41	20 12	5.54
32231	23	05	53.5	+	44	17 27	6.36
32324	23	10	43.9	+	39	43 50	7.40
32437	23	15	34.9	+	45	12 56	6.32
32447	23	16	00.6	+	41	30 01	5.90

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
2231.2 + 3732	open	782	31.8	Near	1
2249.1 + 4211	open	83	4.4	D	2
2304.9 + 4025	medium compact	83	2.1	VD	7
2305.8 + 3935	compact	55	1.6	VD	3
2312.4 + 4012	compact	58	1.5	ED	6
2317.6 + 4129	compact	110	1.3	ED	5
2319.6 + 4109	medium compact	59	2.0	ED	9
2320.1 + 4134	medium compact	81	2.8	VD	4
2320.2 + 4309	open	144	10.0	Near	8

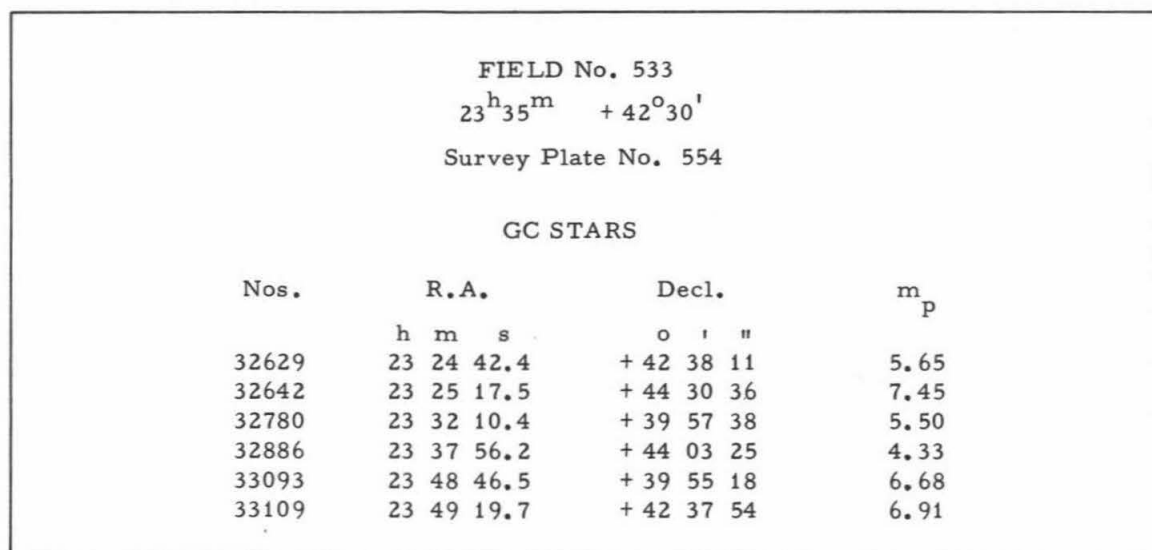
Average number of galaxies per cluster = 161.7

GALAXIES

Position a 1950 δ h m o			NGC IC*	m_p	V_s km/sec	Remarks
22 47.4	+ 43	44		15.6		
22 54.2	+ 40	27		15.7		
22 56.2	+ 40	10		14.8		
22 56.7	+ 40	40		14.7		
23 01.1	+ 41	09		15.0		compact
23 02.2	+ 43	57		15.7		very diffuse
23 02.8	+ 41	41		15.4		
23 05.0	+ 41	55		15.6		
23 05.1	+ 43	20		15.5		very diffuse
23 07.7	+ 42	18		15.5		compact
23 16.3	+ 42	41		15.3		compact
23 16.5	+ 41	48		14.8		
23 17.0	+ 43	42		14.2		
23 17.4	+ 42	35	7618	14.3		
23 17.5	+ 43	41		14.5		
23 17.8	+ 42	41		15.7		very diffuse
23 19.7	+ 40	35	7640	11.6	+ 405	$m_H = 12.5$ S
23 20.1	+ 45	20		15.3		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951	Pettit 1954	Humason, Mayall, Sandage 1956	Holmberg 1958
7640	-	11.85 SBc	11.7 SBc	11.31 Sc+



CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
2319.6 + 4109	medium compact	59	2.0	ED	6
2320.1 + 4134	medium compact	81	2.8	VD	1
2320.2 + 4309	open	144	10.0	Near	3
2341.0 + 4058	open	122	4.2	D	5
2341.1 + 4532	medium compact	57	1.6	VD	4
2343.0 + 3921	medium compact	83	2.8	D	8
2350.1 + 4131	open	93	2.2	ED	7
2352.2 + 4016	open	88	5.7	VD	2

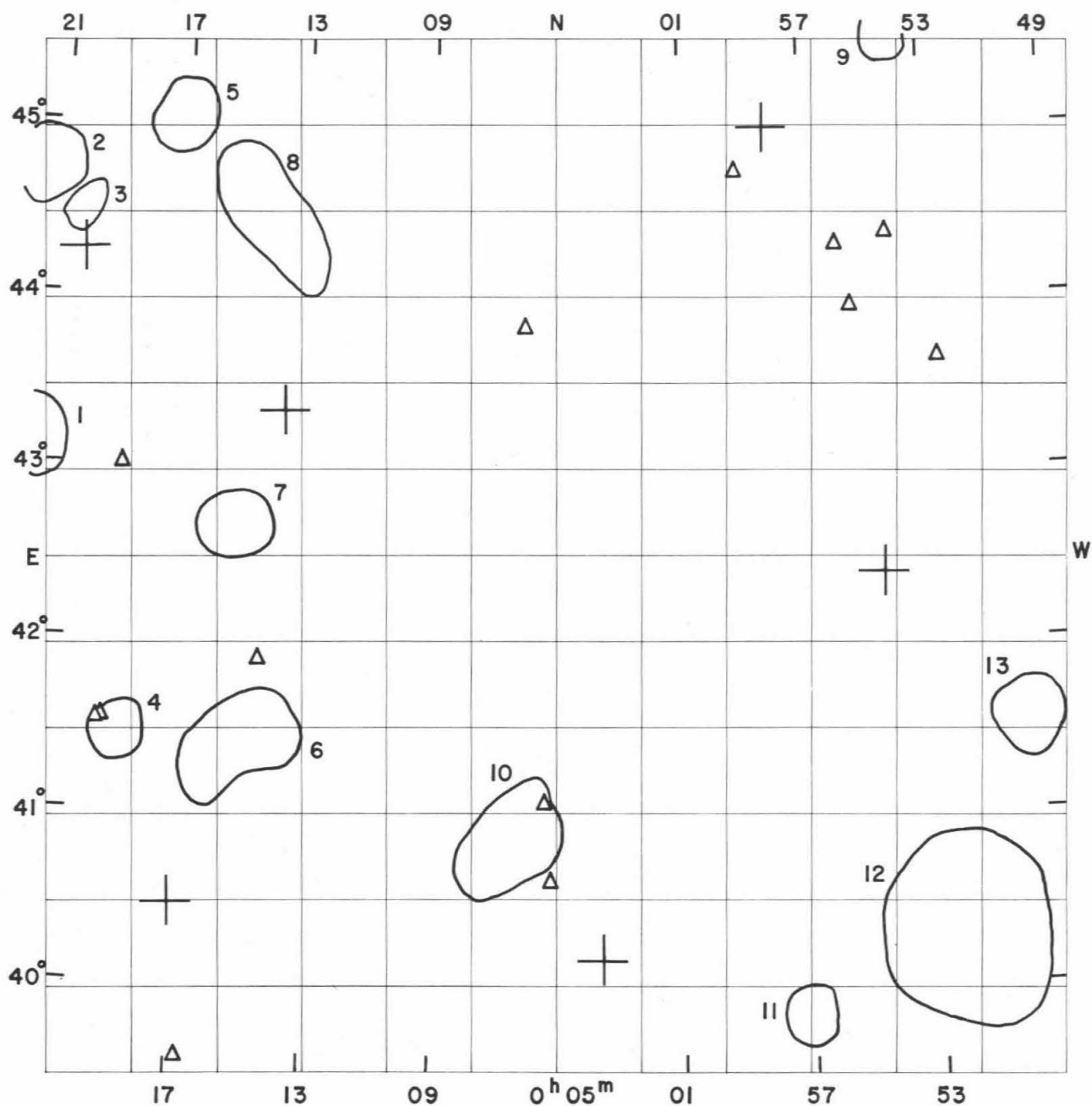
Average number of galaxies per cluster = 90.9

GALAXIES

Position a 1950 δ h m o			NGC IC*	m_p	V_s km/sec	Remarks
23 19.7	+ 40	35	7640	11.6	+ 405	$m_H = 12.5$ S
23 20.1	+ 45	20		15.3		
23 20.8	+ 43	41		15.0		compact
23 22.2	+ 43	57		15.5		
23 22.3	+ 41	04		14.0		
23 25.1	+ 43	50		15.6		
23 25.7	+ 40	11		15.6		
23 27.6	+ 40	43		15.7		resolved dwarf system
23 27.7	+ 39	57		15.7		
23 29.4	+ 44	33		15.7		compact
23 29.9	+ 44	42		15.5		compact
23 31.4	+ 44	54		15.7		
23 31.5	+ 44	25		15.3		
23 32.4	+ 44	02	7707	14.8		
23 34.8	+ 43	53		15.2		
23 37.9	+ 42	59		15.4		
23 39.4	+ 44	42		15.5		very diffuse
23 41.4	+ 45	09		15.6		
23 42.3	+ 44	20		15.2		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
7640	-	-	11.85	SBc	11.7	SBc	11.31	Sc+



FIELD No. 534

$0^h 05^m + 42^\circ 30'$

Survey Plate No. 1243

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	°	'	"	
33211	23	54	31.0	+42	22	48	6.04
33298	23	58	10.0	+44	58	30	6.25
87	0	03	29.4	+40	08	25	6.71
310	0	13	43.5	+43	19	03	6.03
394	0	17	03.3	+40	27	08	6.41
457	0	20	23.2	+44	14	54	7.18

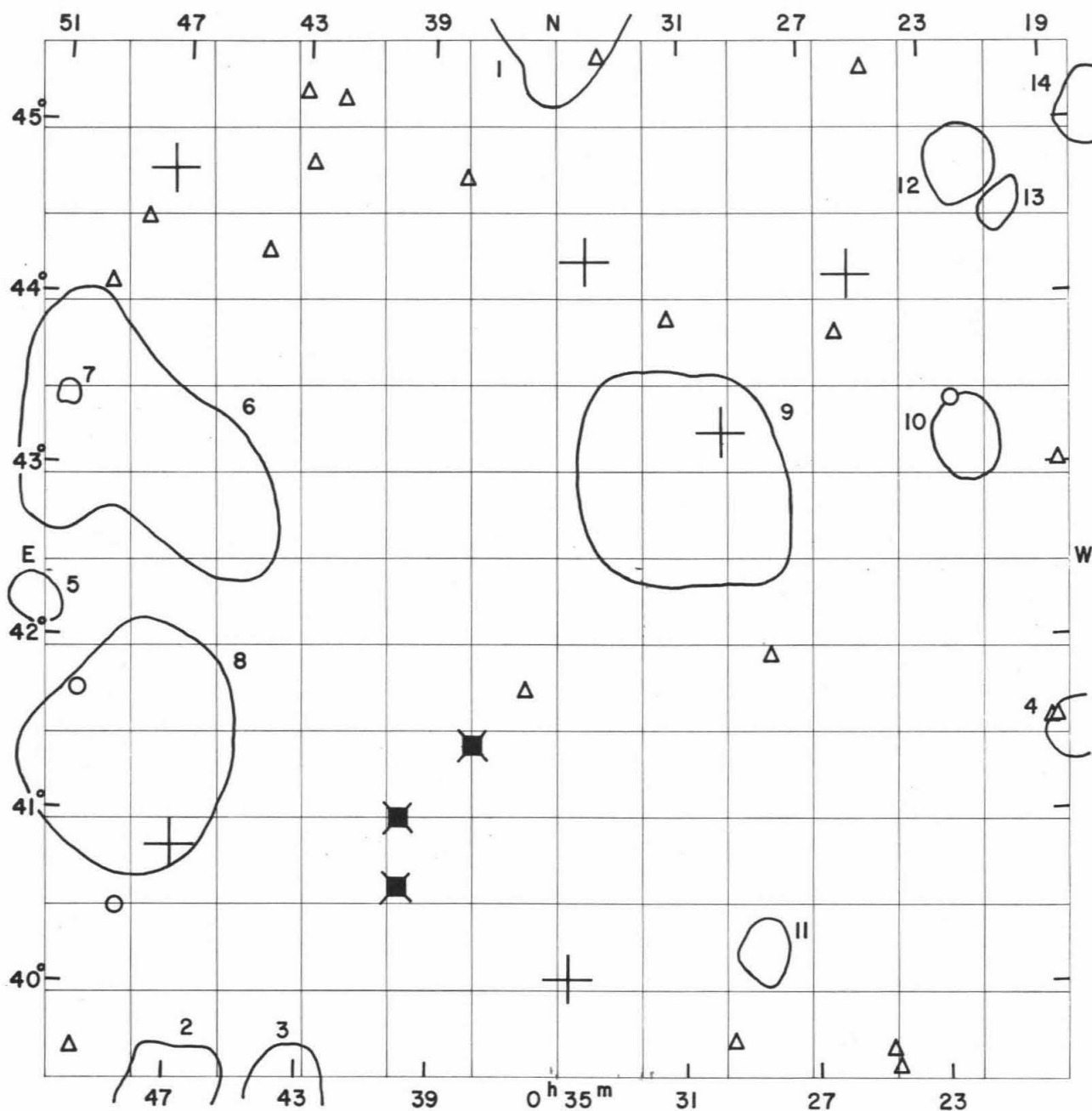
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
2350.1 + 4131	open	93	2.2	ED	13
2352.2 + 4016	open	88	5.7	VD	12
2354.1 + 4532	compact	57	1.5	ED	9
2357.1 + 3948	compact	57	1.8	ED	11
0006.4 + 4050	medium compact	64	3.3	VD	10
0014.3 + 4427	medium compact	138	3.5	VD	8
0015.0 + 4123	medium compact	103	3.3	VD	6
0015.2 + 4238	open	69	2.2	ED	7
0017.2 + 4501	medium compact	105	2.1	ED	5
0018.8 + 4127	compact	92	1.9	ED	4
0020.5 + 4429	compact	79	1.3	ED	3
0021.7 + 4444	medium compact	96	2.2	VD	2
0021.8 + 4309	medium compact	78	2.3	VD	1

Average number of galaxies per cluster = 86.1

GALAXIES

Position			NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ				
h	m	o				
23	52.7	+43 37		15.6		star superposed
23	54.3	+44 21		15.6		diffuse
23	55.4	+43 55		15.6		
23	55.9	+44 17		15.5		
23	59.1	+44 44		15.7		very compact
0	05.2	+40 36		15.5		
0	05.4	+41 04		15.6		
0	06.0	+43 50		15.7		
0	14.4	+41 53		15.5		
0	16.7	+39 33		15.7		
0	19.0	+43 00		15.7		
0	19.3	+41 32		15.6		
0	19.4	+41 32		15.6		



FIELD No. 535

$0^{\text{h}}35^{\text{m}} + 42^{\circ}30'$

Survey Plate No. 851

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	o	'	"	
546	0	25	31.9	+	44	07 05	5.16
634	0	29	44.4	+	43	13 09	6.43
726	0	34	02.9	+	44	12 47	5.44
739	0	34	43.9	+	40	03 27	6.84
972	0	46	30.3	+	40	48 35	7.42
999	0	47	30.1	+	44	43 48	6.12

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0017.2 + 4501	medium compact	105	2.1	ED	14
0018.8 + 4127	compact	92	1.9	ED	4
0020.5 + 4429	compact	79	1.3	ED	13
0021.7 + 4444	medium compact	96	2.2	VD	12
0021.8 + 4309	medium compact	78	2.3	VD	10
0028.6 + 4013	medium compact	55	1.8	ED	11
0030.9 + 4255	open	120	7.0	MD	9
0034.7 + 4536	medium compact	111	4.1	D	1
0043.3 + 3920	medium compact	101	3.0	D	3
0046.8 + 3924	medium compact	101	3.0	VD	2
0048.2 + 4305	medium compact	211	7.4	Near	6
0048.3 + 4119	medium compact	140	7.1	VD	8
0050.6 + 4325	compact	45	0.7	ED	7
0051.4 + 4212	medium compact	81	1.5	ED	5

Average number of galaxies per cluster = 101.1

GALAXIES

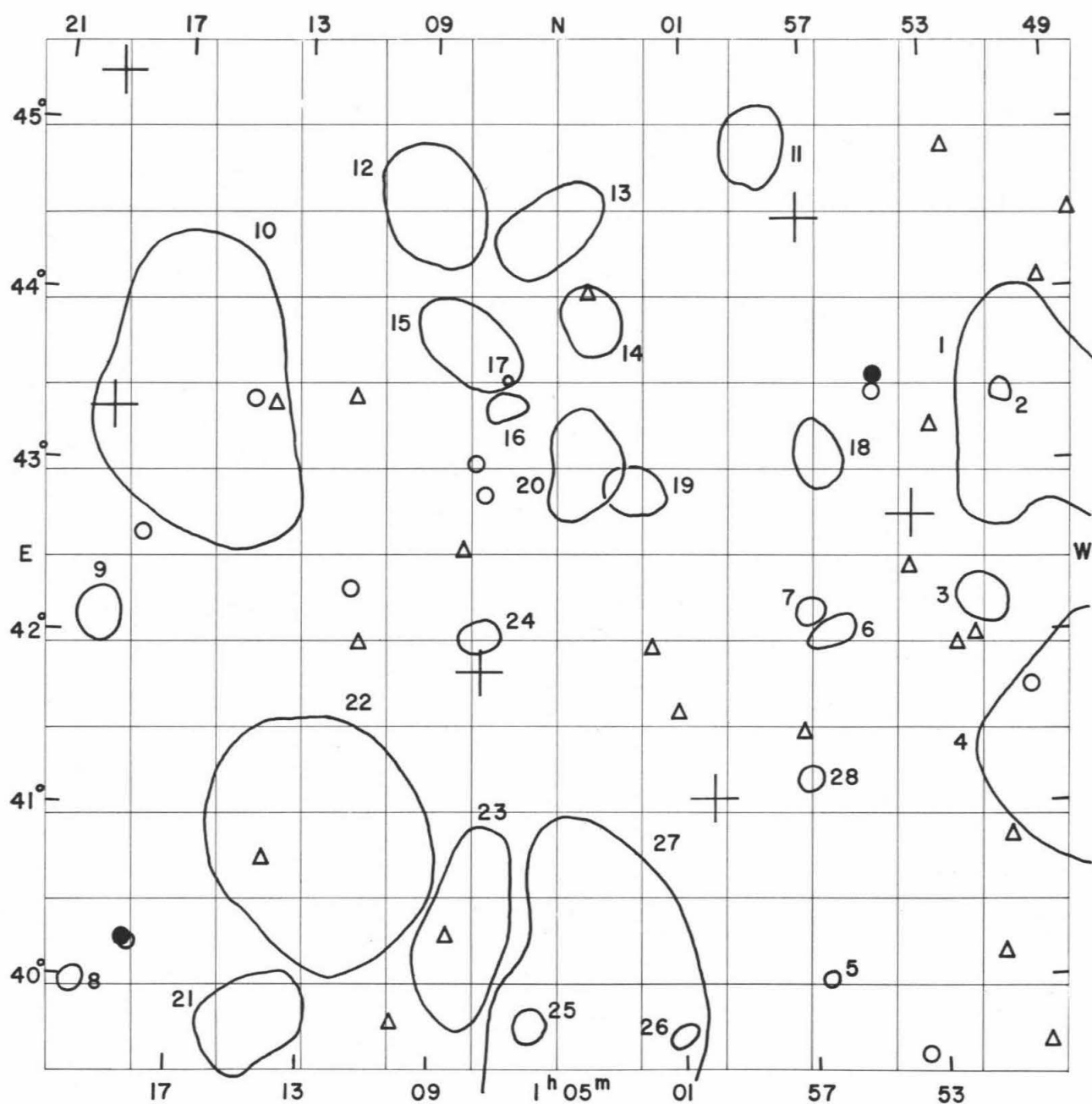
Position a 1950 δ h m o	NGC IC*	m_p	V_s km/sec	Remarks
0 19.0 + 43 00		15.7		
0 19.3 + 41 32		15.6		
0 19.4 + 41 32		15.6		
0 22.3 + 43 23		15.0		
0 24.6 + 39 31		15.1		streamer
0 24.8 + 39 37		15.7		very compact
0 24.9 + 45 19		15.7		compact
0 26.0 + 43 46		15.5		
0 28.2 + 41 55		15.7		
0 29.6 + 39 40		15.7		
0 31.4 + 43 52		15.6		very diffuse
0 33.7 + 45 24		15.3		extremely compact
0 36.0 + 41 43		15.7		very diffuse
0 37.6 + 41 25	205	9.4	- 239	$m_H = 10.8$ Ep
0 37.9 + 44 42		15.6		
0 39.9 + 40 36	221	9.2	- 213	$m_H = 9.5$ E
0 40.0 + 41 00	224	4.3	- 299	$m_H = 5$ Sb *)
0 42.0 + 45 09		15.7		diffuse
0 42.9 + 44 46		15.7		
0 43.2 + 45 12		15.7		
0 44.3 + 44 15		15.7		compact
0 48.3 + 44 27		15.7		
0 48.7 + 40 27		14.6		
0 49.4 + 44 04		15.5		
0 49.9 + 39 37		15.2		
0 50.1 + 41 42		14.7		

*) NGC 206 is a star cloud within NGC 224.

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
205	8.9	Ep	9.84	SB0	-	SB0	8.89	Ep
221	-	-	9.46	E2	-	E2	9.06	E
224	-	-	-	-	-	Sb	4.33	Sb-





FIELD No. 536

$1^{\text{h}}05^{\text{m}} + 42^{\circ}30'$

Survey Plate No. 627

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	o	i	"	
1118	0	53	42.2	+	42	42 31	6.61
1192	0	57	13.1	+	44	26 40	6.04
1254	1	00	05.1	+	41	04 37	5.86
1410	1	07	27.8	+	41	48 58	5.74
1641	1	19	17.0	+	43	19 23	6.62
1647	1	19	23.1	+	45	16 03	4.99

CLUSTERS OF GALAXIES

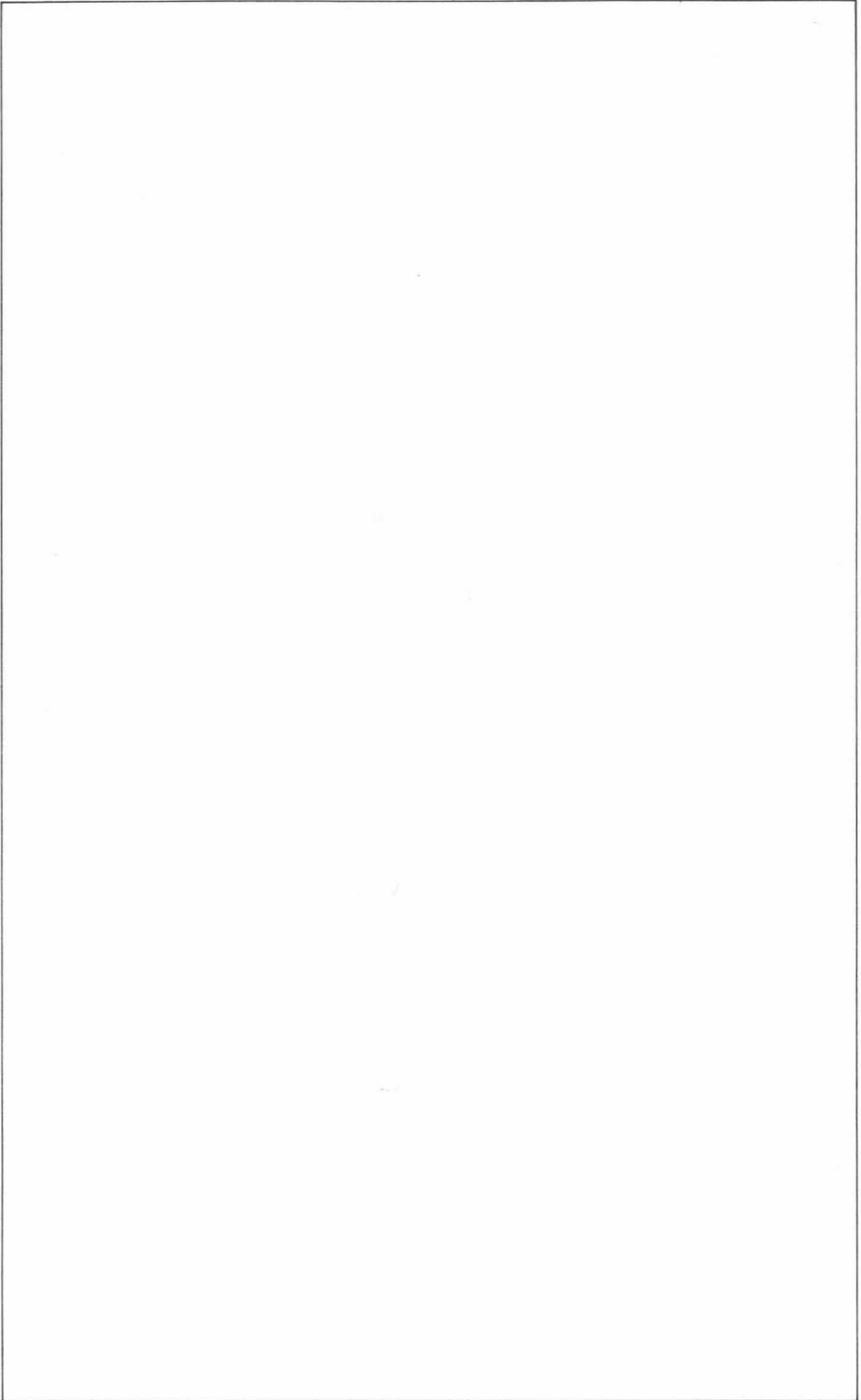
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0048.2 + 4305	medium compact	211	7.4	Near	1
0048.3 + 4119	medium compact	140	7.1	VD	4
0050.6 + 4325	compact	45	0.7	ED	2
0051.4 + 4212	medium compact	81	1.5	ED	3
0056.3 + 4201	medium compact	72	1.2	VD	6
0056.6 + 4000	medium compact	41	0.5	ED	5
0056.6 + 4302	open	54	1.8	ED	18
0056.9 + 4208	compact	75	0.9	ED	7
0057.1 + 4110	medium compact	55	0.8	ED	28
0058.6 + 4452	medium compact	99	2.1	MD	11
0101.1 + 3940	open	35	0.7	ED	26
0102.5 + 4251	compact	102	1.7	ED	19
0103.7 + 3942	medium compact	163	9.1	Near	27
0103.9 + 4350	medium compact	116	2.0	ED	14
0104.1 + 4301	medium compact	88	2.8	VD	20
0105.3 + 4422	open	78	2.8	ED	13
0105.8 + 3944	medium compact	45	1.0	ED	25
0106.7 + 4330	compact	37	0.3	ED	17
0106.8 + 4320	compact	110	1.1	ED	16
0107.5 + 4200	medium compact	55	1.2	ED	24
0107.8 + 4342	open	62	2.8	VD	15
0107.9 + 4017	medium compact	115	4.2	MD	23
0109.1 + 4432	medium compact	122	3.6	VD	12
0112.4 + 4049	medium compact	310	7.5	D	22
0114.4 + 3944	medium compact	87	3.3	D	21
0116.3 + 4322	open	217	7.8	D	10
0119.4 + 4206	compact	81	1.6	ED	9
0120.0 + 3959	compact	45	0.8	ED	8

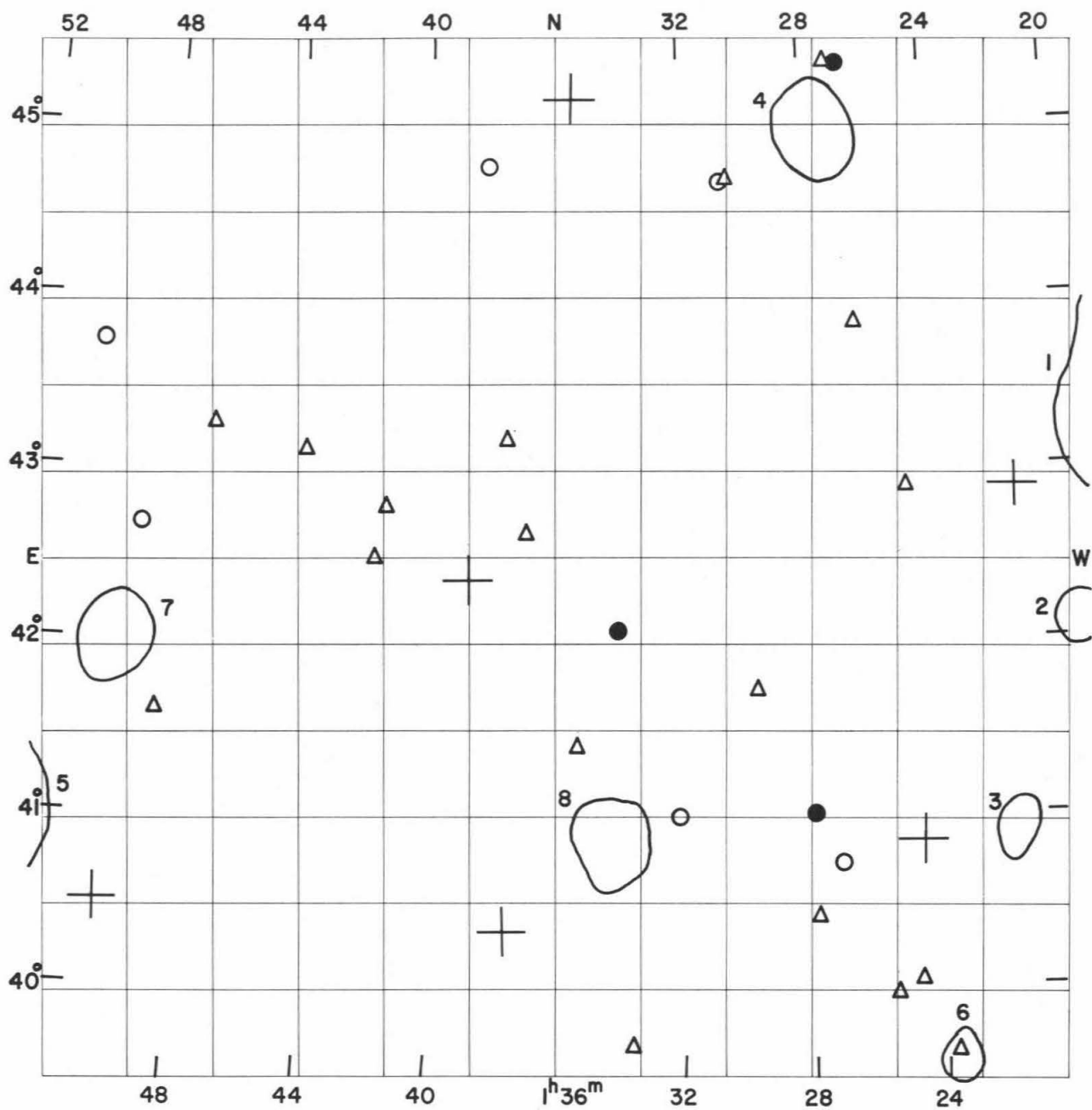
Average number of galaxies per cluster = 97.9

GALAXIES

Position a 1950 δ h m o			NGC IC*	m_p	V_s km/sec	Remarks
0 48.3	+ 44	27		15.7		
0 49.4	+ 44	04		15.5		
0 49.9	+ 39	37		15.2		
0 50.1	+ 41	42		14.7		
0 50.9	+ 40	50		15.3		
0 51.2	+ 40	08		15.7		
0 51.8	+ 42	00		15.6		
0 52.4	+ 41	57		15.5		
0 52.4	+ 44	51		15.7		
0 53.0	+ 43	13		15.7		
0 53.6	+ 39	33		14.8		
0 53.8	+ 42	23		15.6		
0 54.8	+ 43	31	317	13.8		double system
0 54.9	+ 43	25		14.9		
0 57.2	+ 41	27		15.6		
1 01.2	+ 41	35		15.2		very diffuse
1 02.0	+ 41	57		15.4		
1 04.0	+ 44	01		15.5		diffuse
1 07.3	+ 42	50		14.5		
1 07.6	+ 43	01		14.2		

Position				NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ					
h	m	o	'				
1	08.0	+ 42	31		15.7		
1	08.4	+ 40	16		15.7		compact
1	10.1	+ 39	45		15.2		
1	11.3	+ 41	59		15.4		
1	11.4	+ 43	23		15.7		
1	11.5	+ 42	17		14.6		
1	14.0	+ 43	21		15.7		diffuse
1	14.2	+ 40	42		15.7		
1	14.7	+ 43	22		14.8		
1	18.2	+ 40	12		14.8		
1	18.2	+ 42	35		15.0		
1	18.4	+ 40	13	477	14.0		





FIELD No. 537

$1^{\text{h}}36^{\text{m}} + 42^{\circ}30'$

Survey Plate No. 824

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	o	'	"	
1692	1	21	22.9	+	42	52 55	6.57
1749	1	24	31.6	+	40	50 29	6.38
1977	1	35	30.4	+	45	08 46	6.34
2025	1	37	37.1	+	40	19 29	4.90
2050	1	38	43.8	+	42	21 49	5.10
2274	1	50	16.8	+	40	29 02	5.63

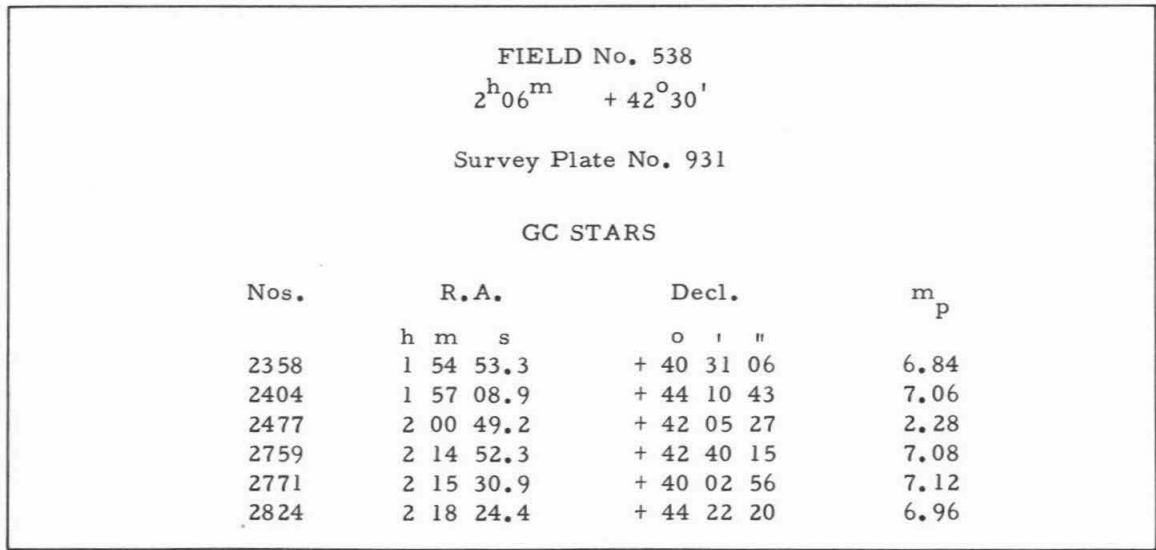
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0116.3 + 4322	open	217	7.8	D	1
0119.4 + 4206	compact	81	1.6	ED	2
0121.7 + 4055	medium compact	71	1.5	ED	3
0123.5 + 3933	medium compact	69	1.4	ED	6
0127.5 + 4457	compact	152	2.8	VD	4
0134.2 + 4050	medium compact	91	2.7	D	8
0149.8 + 4201	medium compact	102	2.7	D	7
0155.2 + 4051	medium compact	152	7.3	MD	5

Average number of galaxies per cluster = 116.9

GALAXIES

Position				NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ					
h	m	o	i				
1	23.7	+ 39	37		15.7		
1	24.7	+ 40	02		15.6		
1	24.9	+ 42	54		15.4		
1	25.5	+ 39	58		15.5		
1	26.3	+ 43	51		15.7		
1	26.8	+ 45	21		13.7		
1	27.1	+ 40	43		14.3		
1	27.2	+ 45	22		15.1		
1	27.9	+ 40	25		15.5		
1	27.9	+ 41	00	573	13.5		
1	29.7	+ 41	44		15.5		
1	30.4	+ 44	41		15.4		
1	30.6	+ 44	40	590	14.2		
1	32.1	+ 41	00	605	14.3		
1	33.6	+ 39	40		15.2		
1	34.0	+ 42	04	620	13.9		
1	35.3	+ 41	24		15.1		
1	36.9	+ 42	38		15.7		
1	37.6	+ 43	10		15.5		
1	38.2	+ 44	45		15.0		compact
1	41.4	+ 42	47		15.6		
1	41.7	+ 42	30		15.7		compact
1	43.9	+ 43	07		15.6		
1	46.9	+ 43	16		15.7		
1	48.5	+ 41	36		15.7		
1	49.1	+ 42	40		14.7		
1	50.5	+ 43	43		14.2		



CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0149.8 + 4201	medium compact	102	2.7	D	9
0155.2 + 4051	medium compact	152	7.3	MD	6
0159.0 + 3932	open	163	6.6	MD	7
0200.2 + 4013	medium compact	103	4.0	MD	2
0208.4 + 4140	compact	76	2.0	VD	3
0210.0 + 3852	medium compact	173	7.0	MD	8
0214.9 + 3935	medium compact	105	2.4	VD	5
0216.5 + 4353	medium compact	89	2.9	VD	4
0303.0 + 4125	medium compact	5130	77.1	Near	1 *)

Average number of galaxies per cluster = 677.0

*) Cluster No. 1 contains the conventional Perseus Cluster as one of its condensations. See special map on page 244.

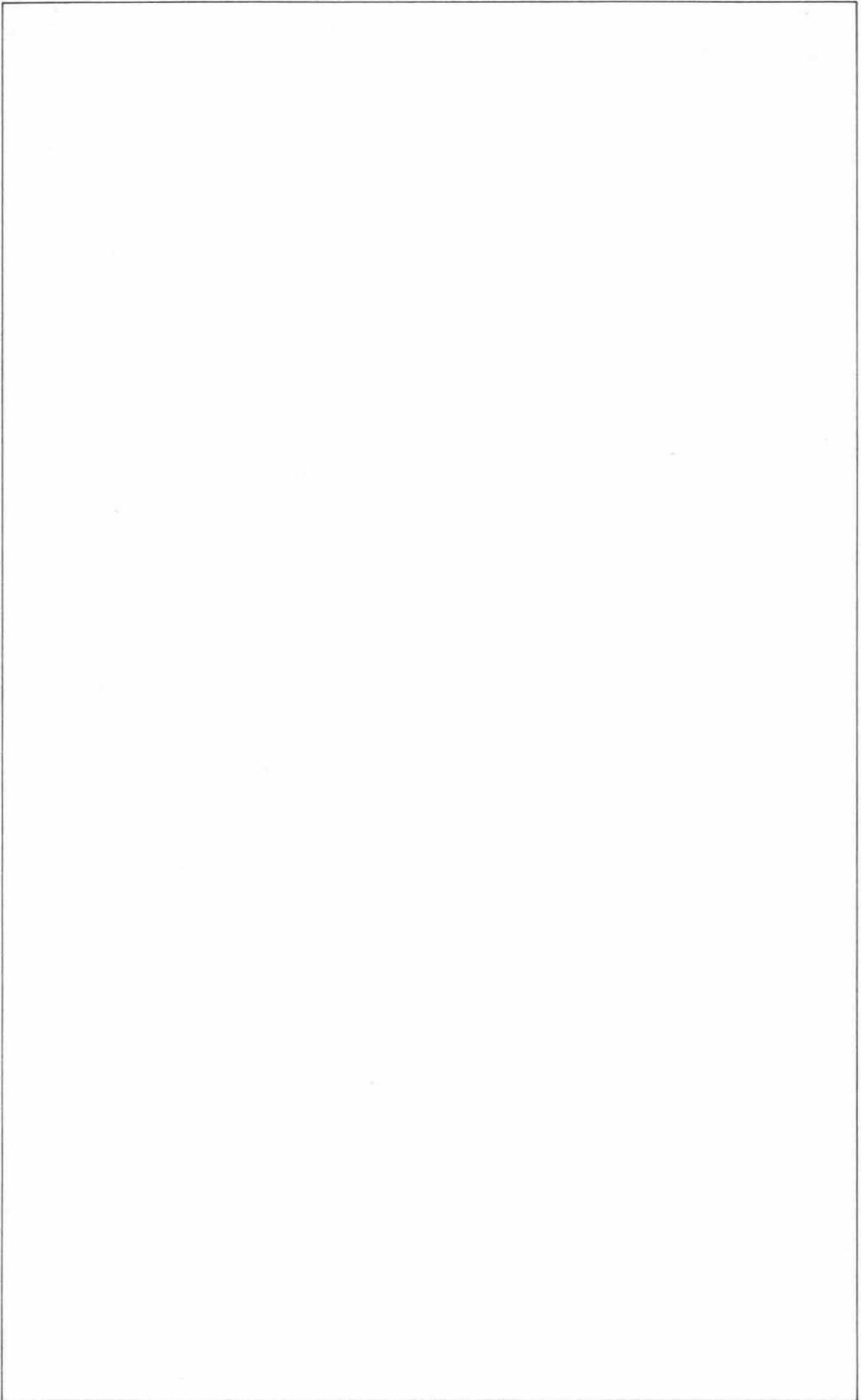
GALAXIES

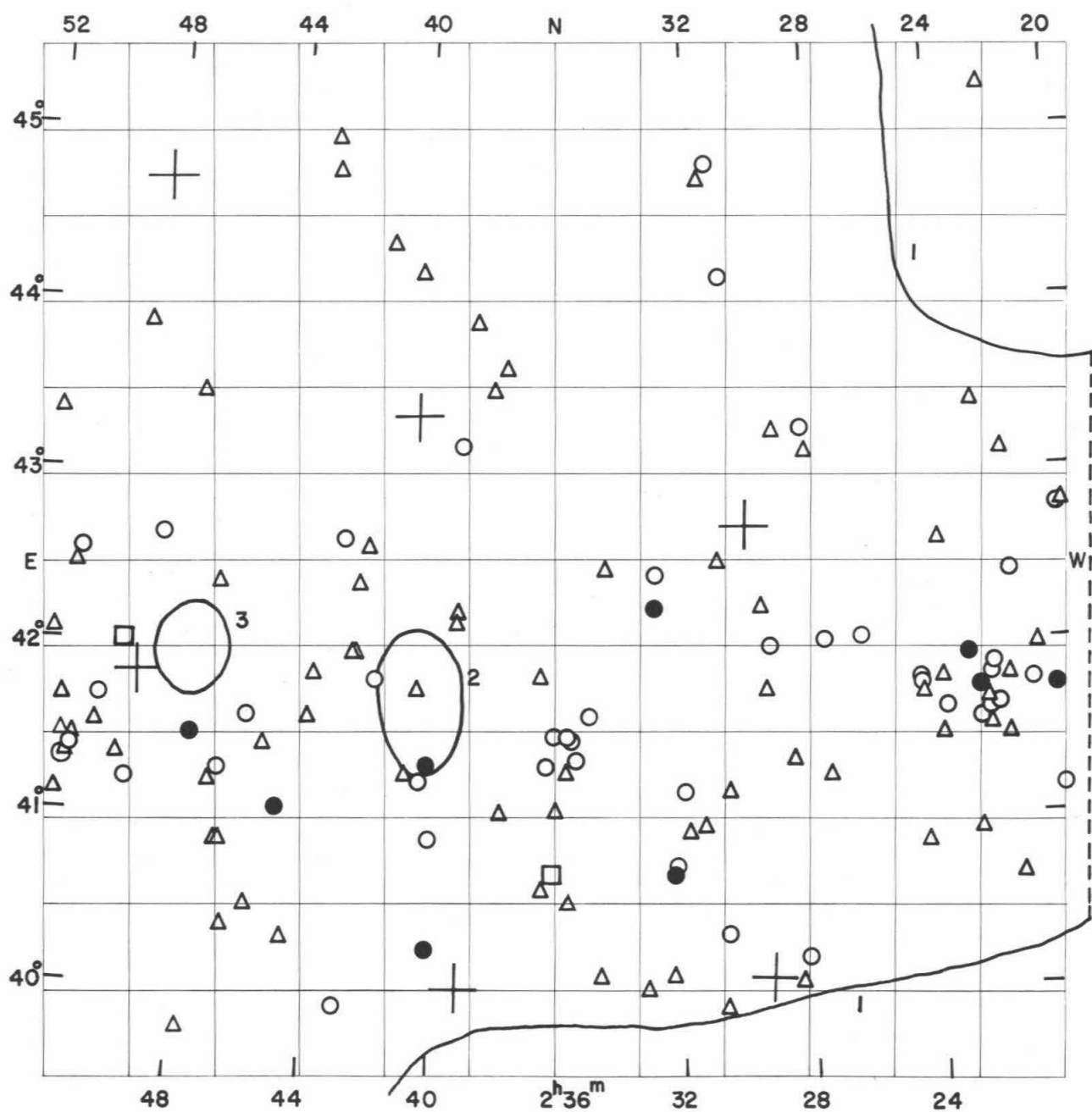
Position			NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ				
h	m	o				
1	50.5	+ 43 43		14.2		
1	52.1	+ 39 40		15.6		
1	53.9	+ 40 06		14.5		
1	54.8	+ 44 41	746	13.8		
1	55.1	+ 41 43		15.6		
1	55.2	+ 42 02		15.6		
1	55.5	+ 44 20		15.1		
1	56.0	+ 41 25		15.7		
1	58.4	+ 44 46		14.8		
1	58.7	+ 44 40		15.6		
1	59.5	+ 39 53		15.7		
1	59.8	+ 44 47		15.3		
2	00.7	+ 42 46		15.2		
2	02.6	+ 39 36		14.3		
2	02.6	+ 44 58		15.6		
2	02.9	+ 44 58		14.6		
2	03.4	+ 44 08		15.7		
2	03.6	+ 45 22		15.6		
2	03.7	+ 44 20	812	12.8		
2	03.7	+ 45 27		15.7		compact
2	04.0	+ 42 44		15.5		
2	04.5	+ 45 23		14.2		
2	04.7	+ 44 37		15.3		
2	04.8	+ 43 21		15.5		
2	05.3	+ 41 15		14.5		
2	05.5	+ 42 46		15.4		
2	06.0	+ 44 03		15.6		
2	06.4	+ 44 15		15.5		
2	07.2	+ 41 17		15.5		compact
2	07.6	+ 41 17		15.4		
2	07.8	+ 41 07		15.7		compact
2	09.0	+ 44 20	846≡847	13.2		
2	10.2	+ 41 01		15.5		
2	10.9	+ 41 39		15.0		
2	11.1	+ 39 50		15.7		
2	12.4	+ 43 52		15.6		
2	12.8	+ 42 35		15.6		

Position a 1950 δ				NGC IC*	m_p	V_s km/sec	Remarks
h	m	o	'				
2	13.1	+42	35		15.7		
2	14.0	+39	54		15.7		compact
2	15.9	+40	20		15.6		diffuse
2	16.1	+41	30		15.1		compact
2	16.6	+43	46		15.7		
2	16.9	+41	03		15.0		
2	16.9	+41	29		15.4		
2	17.3	+40	34		15.5		very diffuse
2	17.4	+41	20		15.3		
2	18.0	+41	35		15.6		
2	18.2	+42	39		15.3		
2	18.8	+44	08		15.6		compact
2	19.1	+42	35		15.7		compact
2	19.1	+43	19		15.7		
2	19.4	+42	07	891	10.8	+ 72	$m_H = 12.2$ S
2	19.4	+42	50		15.4		
2	19.7	+41	56		15.7		
2	19.8	+42	47		15.2		
2	20.0	+41	09		14.1		peculiar
2	20.0	+42	46		15.0		double system
2	20.2	+41	44	898	13.8		
2	20.8	+41	59		15.7		
2	20.9	+41	46		14.8		
2	21.4	+40	39		15.1		
2	21.6	+41	28		15.7		diffuse
2	21.6	+41	48		15.7		
2	21.6	+42	24		14.3		compact
2	21.7	+43	06		15.6		compact
2	22.0	+41	38		14.9		
2	22.0	+45	15		15.5		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
891	-	-	11.23	Sb	10.8	Sb	10.85	Sb+





FIELD No. 539

$2^h 36^m + 42^\circ 30'$

Survey Plate No. 449

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	°	'	"	
3037	2	29	14.2	+	40	03 09	6.70
3052	2	29	58.4	+	42	40 38	7.10
3245	2	39	05.0	+	39	59 01	4.99
3268	2	40	20.2	+	43	19 36	6.66
3423	2	48	34.2	+	44	41 21	6.72
3435	2	49	08.1	+	41	48 59	7.25

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0240.2 + 4140	medium compact	105	3.5	MD	2
0247.4 + 4157	medium compact	86	2.6	D	3
0303.0 + 4125	medium compact	5130	77.1	Near	1 *)

Average number of galaxies per cluster = 1773.7

*) Cluster No. 1 contains the conventional Perseus Cluster as one of its condensations. See special map on page 244.

GALAXIES

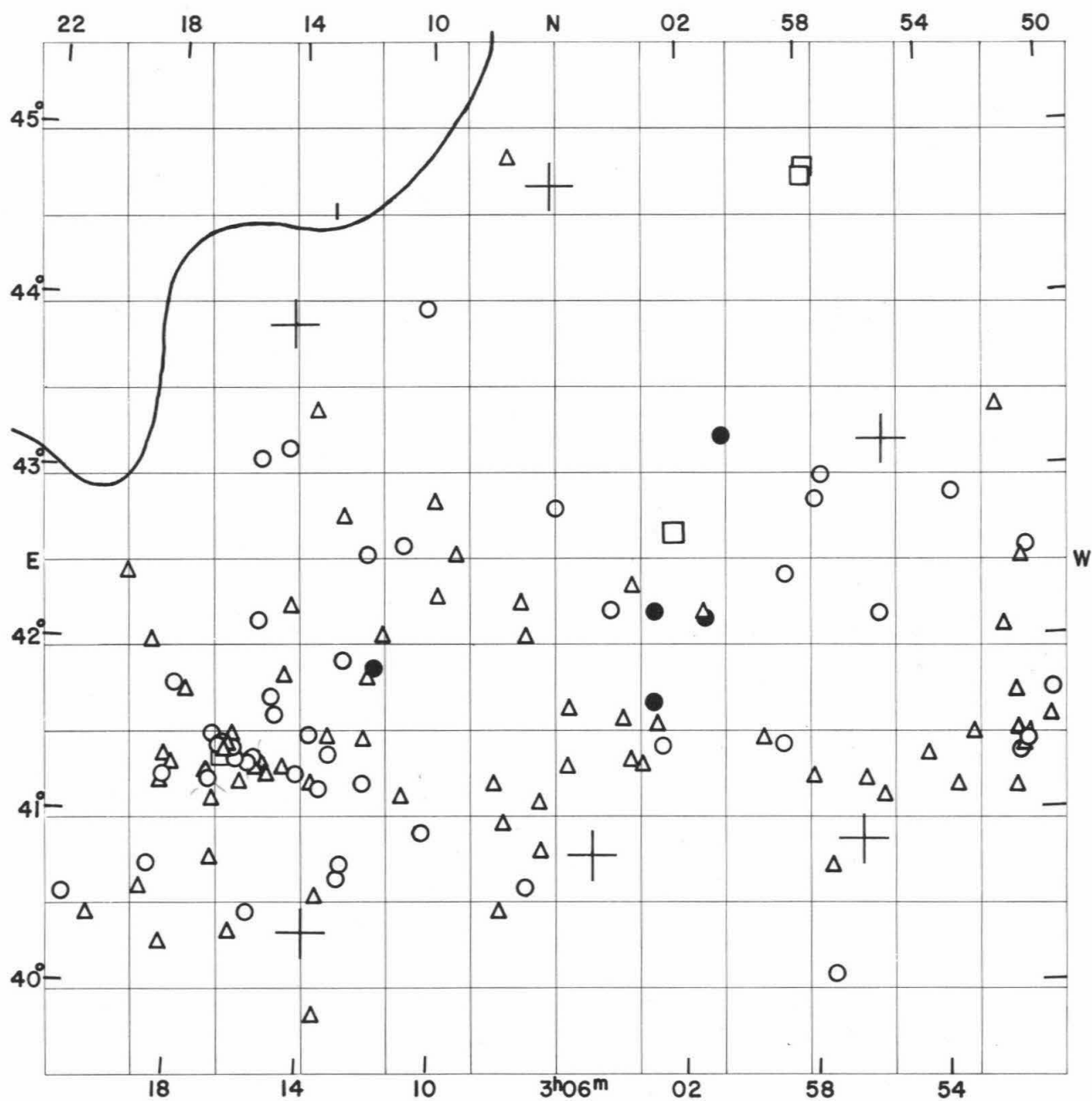
Position α 1950 δ			NGC IC*	m _p	V _s km/sec	Remarks
h	m	o				
2	19.8	+42 47		15.2		
2	20.0	+41 09		14.1		
2	20.0	+42 46		15.0		peculiar double system
2	20.2	+41 44	898	13.8		
2	20.8	+41 59		15.7		
2	20.9	+41 46		14.8		
2	21.4	+40 39		15.1		
2	21.6	+41 28		15.7		diffuse
2	21.6	+41 48		15.7		
2	21.6	+42 24		14.3		compact
2	21.7	+43 06		15.6		compact
2	22.0	+41 38		14.9		
2	22.0	+45 15		15.5		
2	22.1	+41 52	906	14.4		
2	22.2	+41 30		15.7		compact
2	22.2	+41 49	909	14.5		
2	22.3	+41 36	910	14.5		star superposed
2	22.3	+41 41		15.7		compact
2	22.6	+40 55		15.5		
2	22.6	+41 33	912	15.0		very compact
2	22.6	+41 45	911	14.0		
2	22.6	+43 23		15.6		
2	22.9	+41 55	914	13.9		
2	23.6	+41 37		15.0		
2	23.7	+41 28		15.3		
2	23.7	+41 48		15.7		
2	23.8	+42 35		15.7		
2	24.2	+40 50		15.2		very compact
2	24.3	+41 42		15.7		
2	24.4	+41 45	923	14.4		
2	24.4	+41 47		15.0		
2	26.3	+42 02	937	15.0		
2	27.3	+41 14		15.7		compact
2	27.5	+42 01	946	14.5		compact
2	28.0	+43 07		15.7		
2	28.1	+40 10		14.7		
2	28.1	+43 15		15.0		
2	28.3	+40 02		15.7		very compact
2	28.4	+41 20		15.6		
2	29.0	+43 14		15.4		
2	29.2	+41 59		14.6		
2	29.3	+41 44		15.6		very compact
2	29.4	+42 12		15.7		

Position			NGC IC*	m_p	V_s km/sec	Remarks
α	1950	δ				
h	m	o				
2	30.5	+41 08		15.3		
2	30.6	+39 53		15.3		
2	30.6	+40 19		15.0		very diffuse
2	30.7	+44 08		14.3		
2	30.8	+42 28		15.7		
2	31.2	+44 48		15.0		
2	31.3	+40 56		15.2		
2	31.4	+44 42		15.2		
2	31.8	+40 55		15.6		
2	31.9	+41 09		14.7		
2	32.2	+40 43	982	14.3		
2	32.3	+40 05		15.5		
2	32.3	+40 40	980	13.2		
2	32.9	+42 12		14.0		
2	32.9	+42 24		15.0		very compact
2	33.1	+40 00		15.7		
2	34.4	+42 25		15.1		
2	34.5	+40 05		15.7		
2	34.9	+41 35		14.8		
2	35.3	+41 20	995	14.9		
2	35.5	+41 27	996	14.5		
2	35.6	+40 30		15.4		diffuse
2	35.6	+41 28	999=240*	14.5		
2	35.7	+41 15	1000	15.6		compact
2	36.0	+41 02		15.7		
2	36.0	+41 28	1001	14.7		
2	36.1	+40 40	1003	12.1	+ 585	
2	36.3	+41 17	1005	14.7		compact
2	36.4	+40 35		15.7		
2	36.4	+41 48		15.1		
2	37.6	+43 36		15.4		
2	37.8	+41 01		15.6		
2	37.9	+43 28		15.6		
2	38.5	+43 52		15.1		
2	38.9	+43 09		14.6		
2	39.1	+42 08		15.7		compact
2	39.1	+42 11		15.2		
2	40.0	+40 14		13.8		
2	40.0	+40 51		14.5		
2	40.0	+41 18	1053	14.0		
2	40.3	+41 13		14.6		
2	40.3	+41 44		15.7		
2	40.3	+44 10		15.6		diffuse
2	40.7	+41 15		15.6		
2	41.2	+44 20		15.6		
2	41.7	+41 47		14.8		
2	41.9	+42 34		15.7		
2	42.2	+42 21		15.6		
2	42.3	+41 57		15.6		
2	42.4	+41 57		15.7		
2	42.7	+42 36		14.7		
2	42.9	+39 53	1077	14.6		double system
2	43.0	+44 45		15.5		
2	43.1	+44 56		15.4		
2	43.6	+41 50		15.7		
2	43.8	+41 35		15.7		
2	44.5	+40 18		15.1		
2	44.7	+41 03	1086	13.6		
2	45.1	+41 25		15.4		

Position				NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ					
h	m	o	'				
2	45.6	+ 40	29		15.5		compact
2	45.7	+ 41	35		15.0		
2	46.3	+ 40	21		15.7		
2	46.5	+ 40	51	258*	15.5		
2	46.6	+ 40	51	259*	15.6		
2	46.6	+ 41	16		14.7		
2	46.6	+ 42	20		15.7		star superposed
2	46.9	+ 41	11		15.7		
2	47.2	+ 43	27		15.7		
2	47.4	+ 41	29	1106	13.7		
2	47.6	+ 39	45		15.7		
2	48.4	+ 42	38	262*	14.8		
2	49.0	+ 43	52		15.2		very compact
2	49.4	+ 41	12		14.9		
2	49.6	+ 42	00	1122≡1123	13.0		
2	49.8	+ 41	20		15.6		
2	50.3	+ 41	42		14.4		
2	50.4	+ 41	32		15.7		compact
2	51.0	+ 42	32		14.7		
2	51.2	+ 41	25	1130	15.6		compact
2	51.2	+ 42	27		15.7		
2	51.3	+ 41	23	1129	14.6		
2	51.4	+ 41	22	1131	15.6		very compact compact
2	51.5	+ 41	20		14.8		
2	51.5	+ 41	28	265*	15.7		
2	51.5	+ 41	40		15.7		
2	51.6	+ 41	07		15.1		
2	51.8	+ 42	05	266*	15.7		star superposed
2	51.8	+ 43	20		15.7		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954	Humason, Mayall, Sandage 1956		Holmberg 1958	
1003	-	-	12.34	Sc	12.1	Sc	11.92 Sc+



FIELD No. 540

$3^{\text{h}}06^{\text{m}} + 42^{\circ}30'$

Survey Plate No. 1618

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	°	'	"	
3566	2	55	31.6	+	43	09 57	6.87
3587	2	56	25.5	+	40	50 07	6.07
3733	3	04	54.4	+	40	45 52	Var.
3755	3	06	06.8	+	44	40 10	4.00
3914	3	13	54.8	+	40	18 02	6.44
3923	3	14	24.9	+	43	50 34	5.38

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0303.0 + 4125	medium compact	5130	77.1	Near	1 *)

Average number of galaxies per cluster = 5130.0

*) Cluster No. 1 contains the conventional Perseus Cluster as one of its condensations. See special map on page 244.

GALAXIES

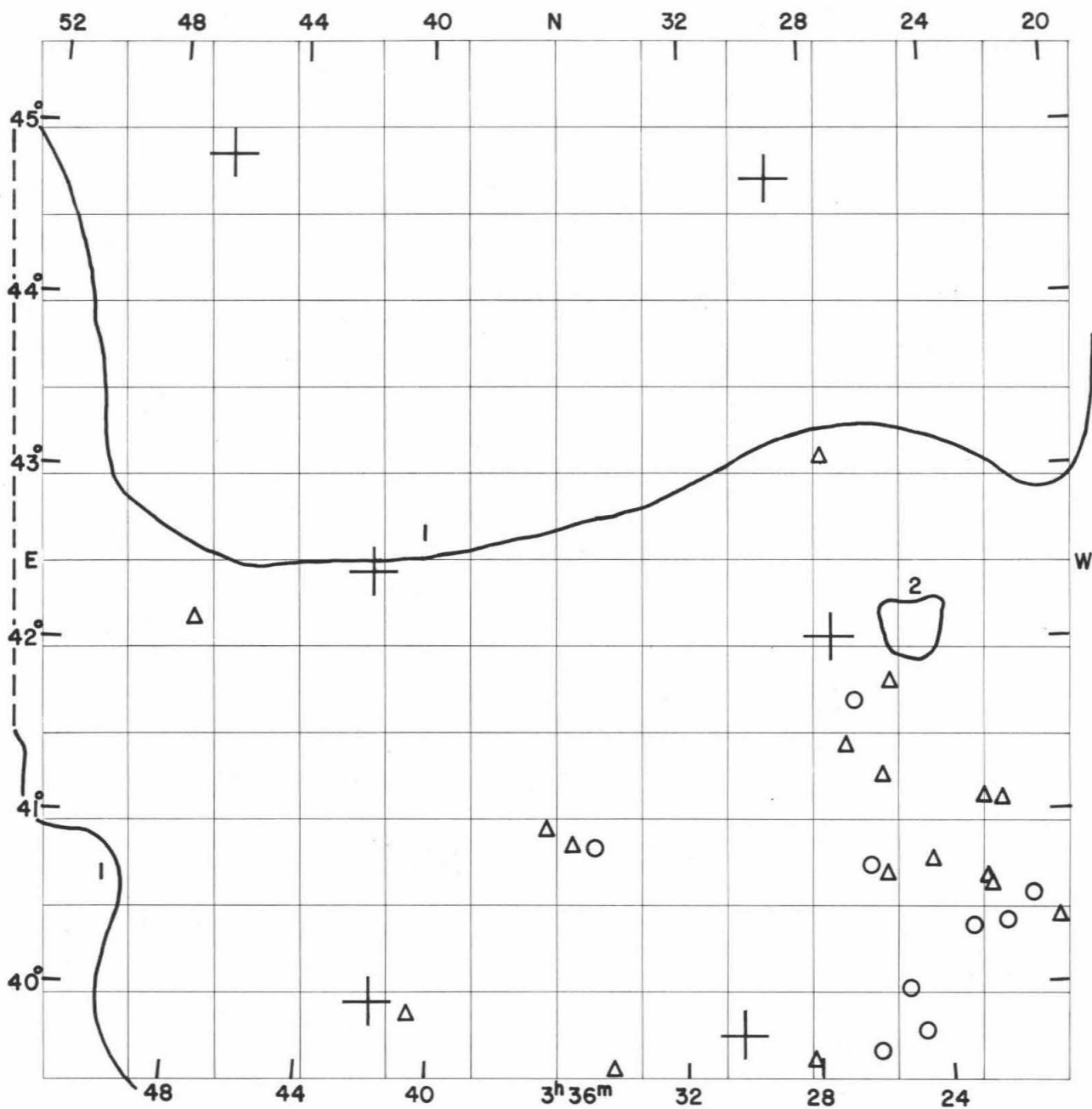
Position α 1950 δ				NGC IC*	m _p	V _s km/sec	Remarks
h	m	o	r				
2	50.3	+ 41	42		14.4		
2	50.4	+ 41	32		15.7		compact
2	51.0	+ 42	32		14.7		
2	51.2	+ 41	25	1130	15.6		compact
2	51.2	+ 42	27		15.7		
2	51.3	+ 41	23	1129	14.6		
2	51.4	+ 41	22	1131	15.6		very compact
2	51.5	+ 41	20		14.8		compact
2	51.5	+ 41	28	265*	15.7		
2	51.5	+ 41	40		15.7		
2	51.6	+ 41	07		15.1		
2	51.8	+ 42	05	266*	15.7		star superposed
2	51.8	+ 43	20		15.7		
2	52.9	+ 41	26		15.2		
2	53.3	+ 42	51	1138	14.1		
2	53.4	+ 41	08		15.6		
2	54.3	+ 41	20		15.3		
2	55.8	+ 41	05		15.5		compact
2	55.8	+ 42	09		14.9		
2	56.3	+ 41	11		15.4		
2	57.4	+ 40	03		15.0		diffuse
2	57.4	+ 40	41		15.6		
2	57.5	+ 42	58	1159	14.2		
2	57.7	+ 42	50		14.7		
2	57.9	+ 41	12		15.4		
2	57.9	+ 44	43	1161	12.6		
2	57.9	+ 44	46	1160	13.0		
2	58.7	+ 42	24	1164	14.4		
2	58.9	+ 41	25		14.9		
2	59.5	+ 41	26		15.4		
3	00.7	+ 43	12	1171	13.6		
3	01.3	+ 42	09	1175	13.8		m _H = 13.0
3	01.4	+ 42	10	1177=281*	15.7		
3	02.2	+ 42	39	1186	12.5		
3	02.7	+ 41	25		14.8		
3	02.9	+ 41	33		15.7		
3	02.9	+ 42	11	284*	13.8		
3	03.0	+ 41	40	1198	14.0		
3	03.3	+ 41	17		15.7		
3	03.6	+ 41	20		15.7		
3	03.6	+ 42	20		15.6		
3	03.8	+ 41	34		15.6		
3	04.2	+ 42	12	288*	15.0		
3	05.6	+ 41	17		15.7		

Position			NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ				
h	m	o	r			
3	05.6	+	41 37	15.7		
3	06.0	+	42 47	14.5		
3	06.4	+	40 48	290*=1884*	15.5	
3	06.5	+	41 04		15.7	
3	07.0	+	40 35	292*=1887*	14.3	
3	07.0	+	42 02		15.5	
3	07.1	+	42 14		15.7	
3	07.6	+	44 50		15.7	
3	07.7	+	40 58	293*=1888*	15.7	
3	07.8	+	40 26	296*	15.6	
3	08.0	+	41 11	1224	15.5	
3	09.2	+	42 30		15.6	
3	09.8	+	42 16		15.6	
3	09.9	+	42 49		15.7	
3	10.2	+	40 54		15.0	
3	10.2	+	43 57		14.5	
3	10.8	+	41 06		15.1	
3	10.8	+	42 34		14.9	compact
3	11.5	+	42 02	301*	15.2	
3	11.7	+	41 51		14.0	
3	11.9	+	41 48		15.4	
3	12.0	+	41 10	1250	14.2	
3	12.0	+	41 25		15.3	
3	12.0	+	42 30		14.8	
3	12.7	+	40 43		14.3	
3	12.7	+	41 53		14.9	
3	12.7	+	42 44		15.6	
3	12.8	+	40 38	309*	14.9	
3	13.2	+	41 21		14.7	
3	13.2	+	41 27		15.7	
3	13.4	+	41 08	310*	14.3	
3	13.5	+	39 50	311*	15.7	
3	13.5	+	40 31		15.5	
3	13.7	+	41 10		15.7	
3	13.7	+	41 27		15.0	
3	13.7	+	43 20		15.7	
3	14.2	+	41 13	1260	14.2	
3	14.4	+	42 11		15.7	
3	14.5	+	41 47		15.6	
3	14.5	+	43 07		14.8	
3	14.6	+	41 16		15.4	compact
3	14.8	+	41 34	312*	14.9	
3	15.1	+	41 14		15.3	
3	15.1	+	41 40	1265	14.7	star superposed
3	15.3	+	41 17		15.7	
3	15.4	+	42 07		14.6	
3	15.4	+	43 03		14.1	
3	15.5	+	41 17	1267	15.4	star superposed
3	15.5	+	41 18	1268	14.5	
3	15.6	+	40 25		14.9	
3	15.7	+	41 17	1270	14.4	+ 4905
3	15.9	+	41 10	1271	15.4	
3	16.1	+	40 19		15.4	
3	16.1	+	41 18	1272	14.5	+ 4172
3	16.2	+	41 21	1273	14.7	+ 5354
3	16.2	+	41 27		15.5	
3	16.3	+	41 24		15.2	
3	16.4	+	41 22	1274=1907*	15.1	compact
3	16.5	+	41 20	1275	13.0	+ 5160 m _H = 12.7 E

Position a 1950 δ				NGC IC*	m_p	V_s km/sec	Remarks
h	m	o	i				
3	16.6	+ 41	23	1277	14.9	+ 4974	
3	16.7	+ 41	22	1278	14.4	+ 6115	
3	16.8	+ 40	44		15.7		
3	16.8	+ 41	04		15.6		compact
3	16.8	+ 41	27	1281	15.0		
3	17.0	+ 41	11	1282	14.3		
3	17.0	+ 41	13	1283	15.6		compact
3	17.6	+ 41	42	313*	15.1		star superposed
3	18.0	+ 41	45	316*	15.0		double system
3	18.1	+ 41	17		15.1		
3	18.3	+ 40	15		15.6		
3	18.3	+ 41	19		15.6		
3	18.4	+ 41	13	1293	15.0		
3	18.5	+ 41	11	1294	15.1		
3	18.7	+ 42	00		15.7		
3	18.8	+ 40	42		14.4		
3	18.9	+ 40	34		15.6		
3	19.6	+ 42	22		15.5		
3	20.6	+ 40	23		15.7		
3	21.4	+ 40	31		15.0		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
1270	-	-	14.65	E3	-	E3	-	-
1272	-	-	14.52	S0	-	-	-	-
1273	-	-	14.88	E1	-	E1	-	-
1275	-	-	13.27	Sp	-	Irr.	-	-
1277	-	-	14.89	E4	-	E4	-	-
1278	-	-	14.47	E1	-	E1	-	-
1282	-	-	14.69	E3	-	-	-	-
1293	-	-	14.80	E3	-	-	-	-
1294	-	-	14.77	E	-	-	-	-



FIELD No. 541
 $3^{\text{h}}36^{\text{m}} + 42^{\circ}30'$

Survey Plate No. 643

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	o	'	"	
4166	3	27	23.0	+	42	01 56	6.88
4217	3	29	12.6	+	44	41 14	6.33
4236	3	30	16.7	+	39	43 57	5.80
4473	3	41	44.2	+	39	55 23	7.47
4474	3	41	47.3	+	42	25 21	3.93
4597	3	46	35.1	+	44	49 01	5.79

CLUSTERS OF GALAXIES

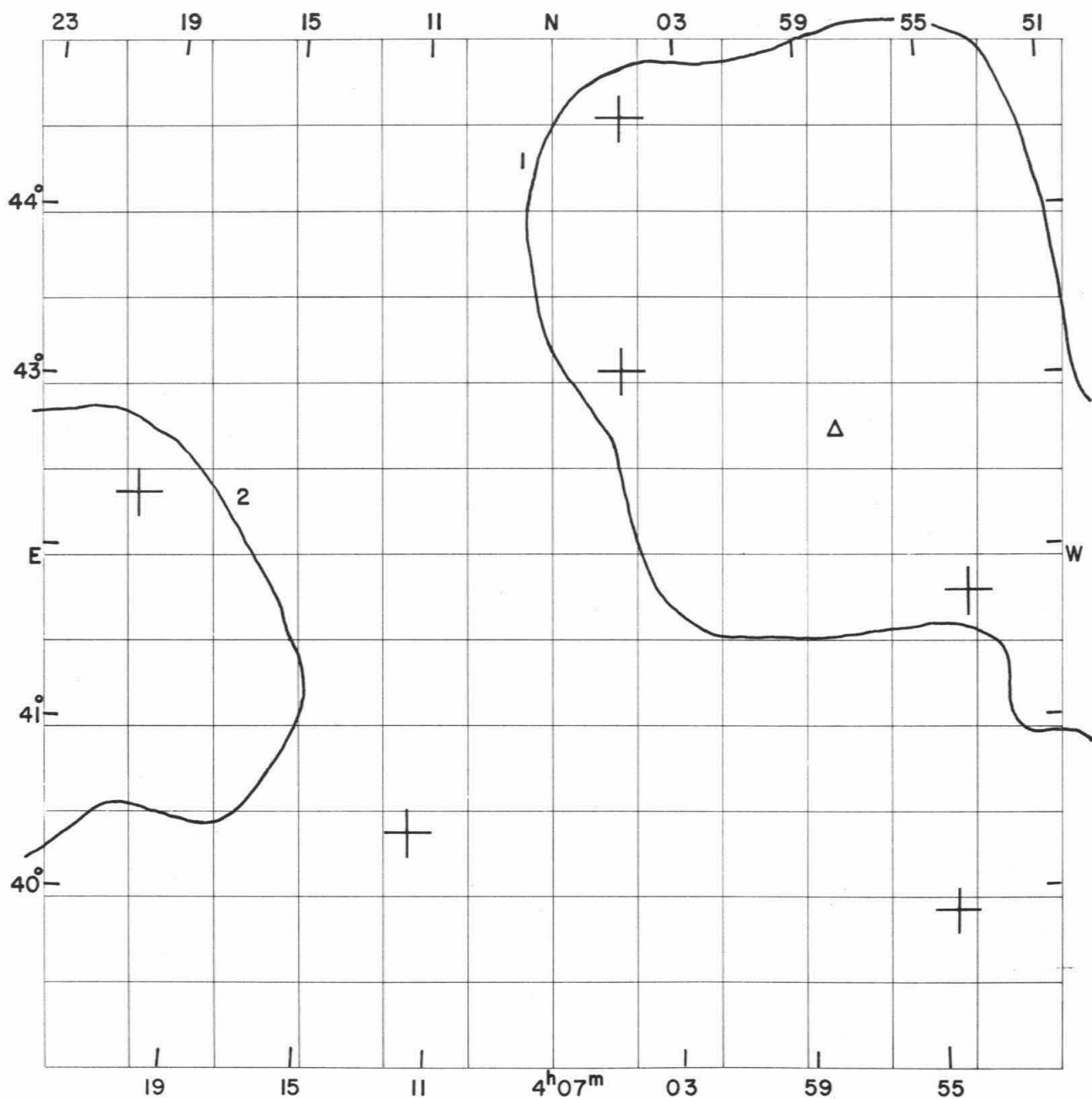
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0303.0 + 4125	medium compact	5130	77.1	Near	1 *)
0324.7 + 4203	compact	69	2.0	D	2

Average number of galaxies per cluster = 2599.5

*) Cluster No. 1 contains the conventional Perseus Cluster as one of its condensations. See special map on page 244.

GALAXIES

Position a 1950 δ			NGC IC*	m _p	V _s km/sec	Remarks
h	m	o				
3	20.6	+ 40 23		15.7		
3	21.4	+ 40 31		15.0		
3	22.2	+ 40 21		14.9		
3	22.2	+ 41 04		15.6		
3	22.6	+ 40 35		15.3		
3	22.8	+ 40 37	320*	15.4		
3	22.8	+ 41 05		15.3		
3	23.2	+ 40 20		14.7		
3	24.4	+ 40 44		15.5		
3	24.8	+ 39 44		14.9		
3	25.2	+ 39 59		15.0		
3	25.6	+ 41 46		15.6		
3	25.8	+ 40 39		15.6		
3	25.9	+ 41 13		15.5		
3	26.2	+ 39 37		14.9		double system
3	26.3	+ 40 42		15.0		double system
3	26.7	+ 41 40	1334	14.8		
3	27.0	+ 41 25	1335	15.7		
3	27.7	+ 43 05		15.7		
3	28.1	+ 39 35		15.4		
3	34.2	+ 39 33		15.7		
3	34.8	+ 40 50		14.8		
3	35.5	+ 40 50		15.7		
3	36.3	+ 40 55		15.1		
3	40.6	+ 39 52		15.1		
3	47.4	+ 42 08		15.7		



FIELD No. 542
 $4^{\text{h}}07^{\text{m}} \quad +42^{\circ}00'$

Survey Plate No. 651

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	°	'	"	
4743	3	53	51.5	+	41	44 13	6.79
4759	3	54	29.5	+	39	52 02	2.96
4957	4	04	43.9	+	44	31 55	7.64
4958	4	04	44.3	+	43	03 33	6.67
5103	4	11	28.7	+	40	21 32	4.89
5305	4	20	06.6	+	42	18 46	5.98

CLUSTERS OF GALAXIES

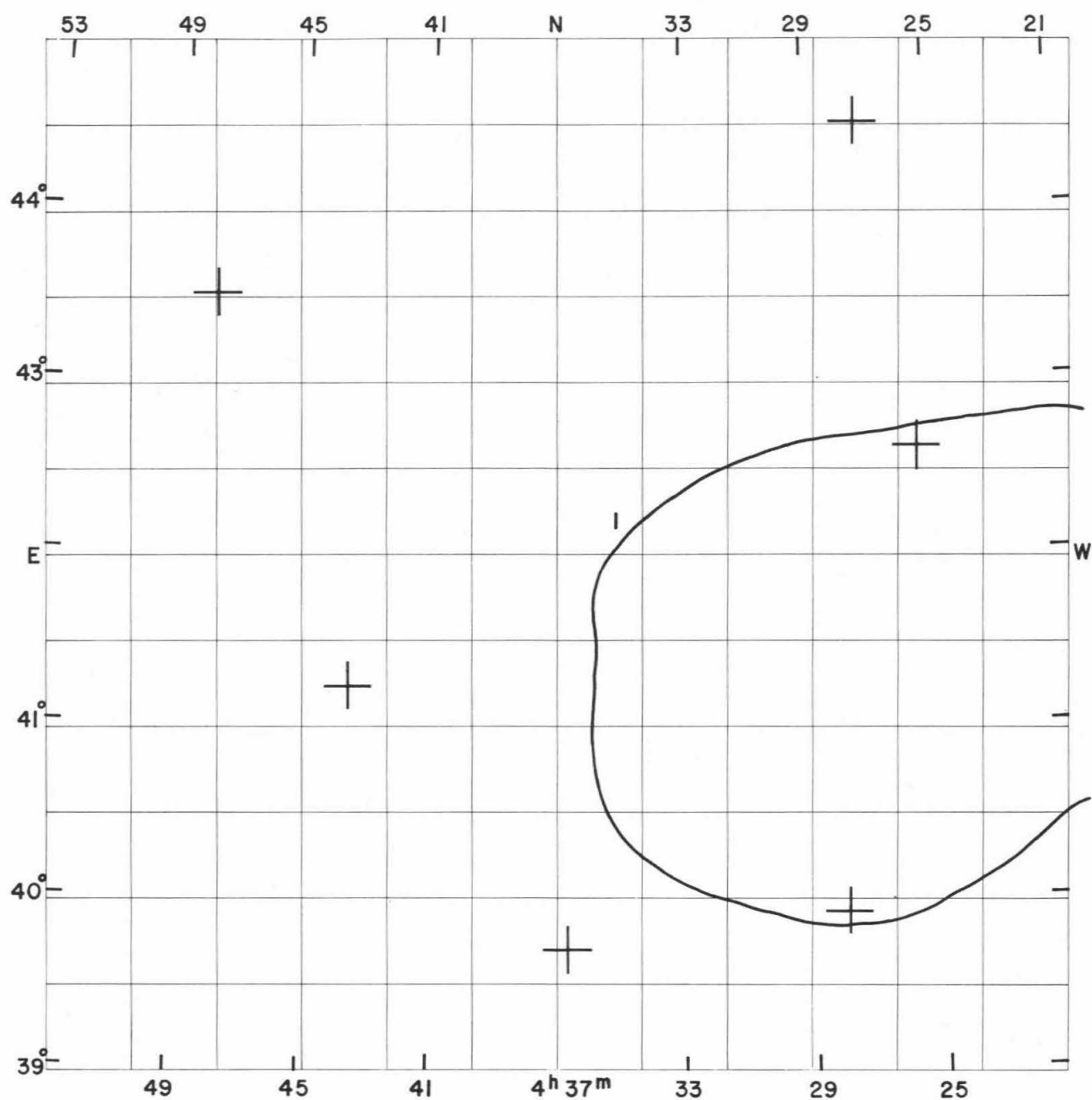
Cluster	Character	Popu- lation	Diameter in cm	Distance	Number on chart
0303.0 + 4125	medium compact	5130	77.1	Near	1 *)
0425.7 + 4120	open	195	18.2	Near	2

Average number of galaxies per cluster = 2662.5

*) Cluster No. 1 contains the conventional Perseus Cluster as one of its condensations. See special map on page 244.

GALAXIES

Position		NGC IC*	m_p	V_s km/sec	Remarks
α	1950 δ				
h	m o ' "				
3	58.0 + 42 42		15.7		



FIELD No. 543

$4^{\text{h}}37^{\text{m}} + 42^{\circ}00'$

Survey Plate No. 644

GC STARS

Nos.	R.A.			Decl.	m_p
	h	m	s		
5424	4	25	31.8	+ 42 36 22	7.27
5469	4	27	18.7	+ 44 29 46	7.12
5489	4	27	58.7	+ 39 54 12	6.9
5672	4	36	39.2	+ 39 41 29	7.57
5808	4	43	32.9	+ 41 12 58	7.02
5895	4	47	58.5	+ 43 29 39	7.37

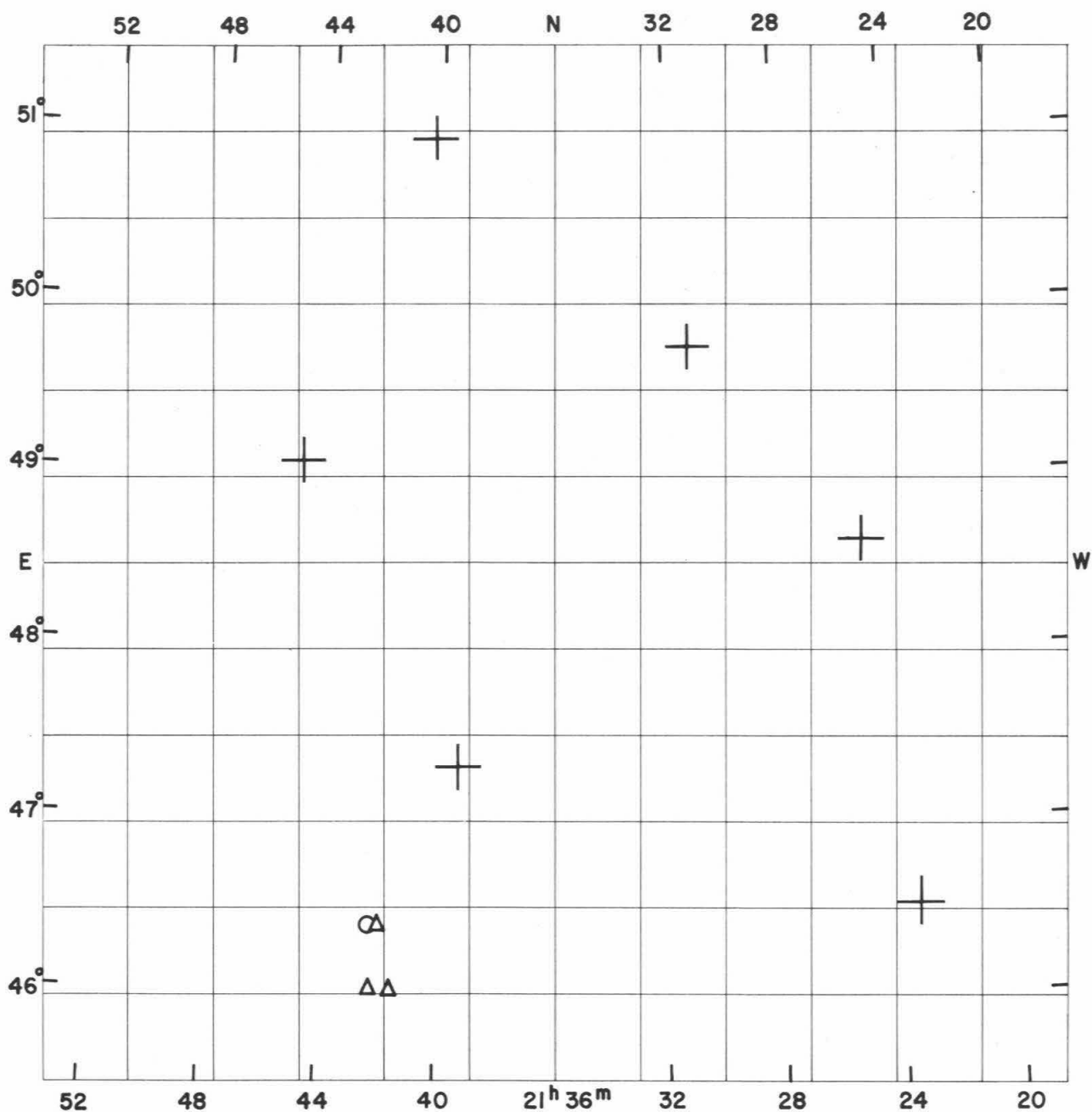
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0425.7 + 4120	open	195	18.2	Near	1

Average number of galaxies per cluster = 195.0

GALAXIES

No galaxies in this field



FIELD No. 544
 $21^{\text{h}}36^{\text{m}} + 48^{\circ}30'$
 Survey Plate No. 589

GC STARS

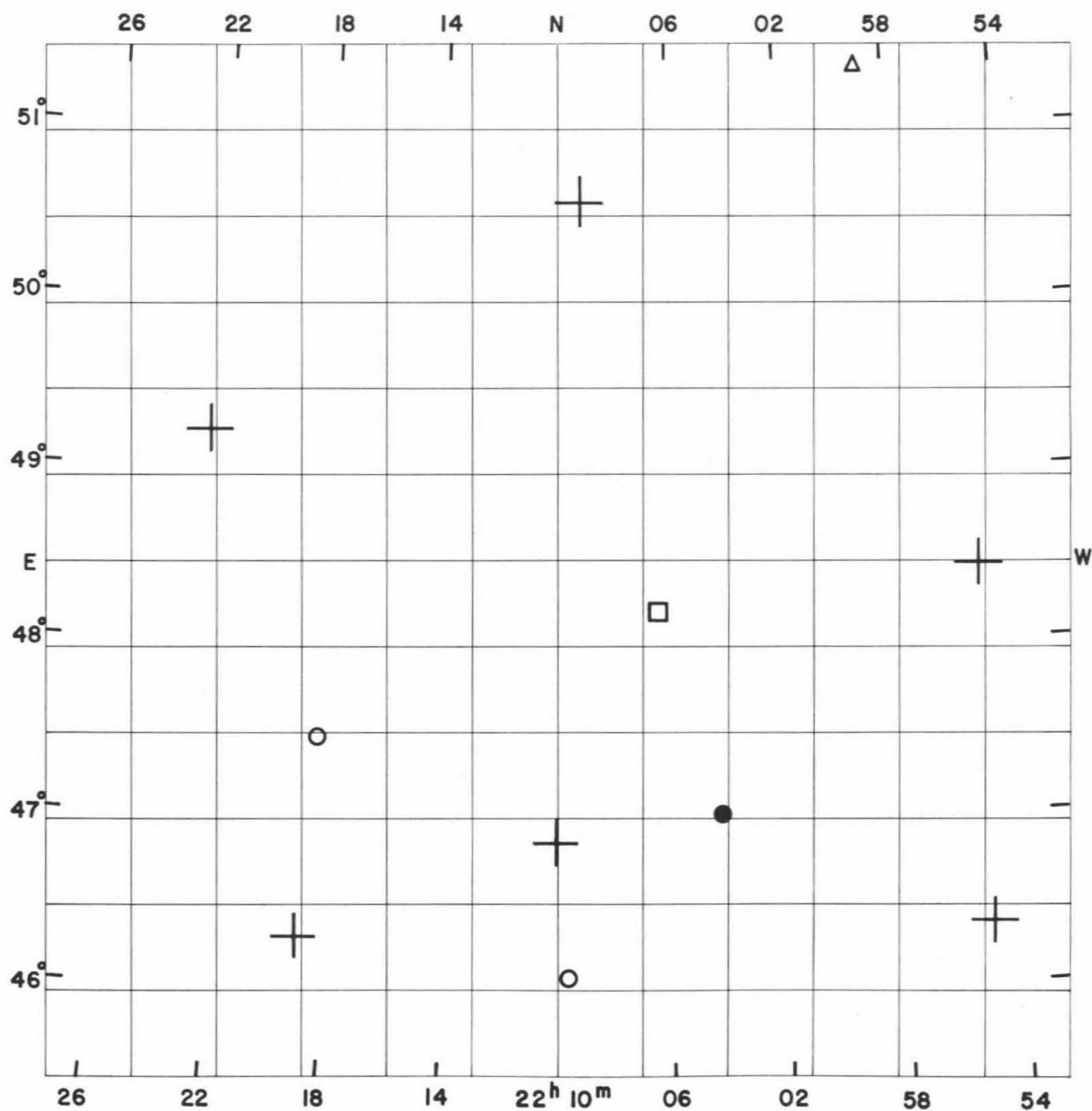
Nos.	R.A.			Decl.			m_p
	h	m	s	o	i	"	
30013	21	23	29.3	+	46	29 49	5.54
30040	21	25	04.9	+	48	37 01	5.31
30185	21	31	10.4	+	49	45 18	5.76
30369	21	39	17.9	+	47	19 01	7.37
30391	21	40	19.0	+	50	57 39	4.78
30512	21	44	56.6	+	49	04 39	4.26

CLUSTERS OF GALAXIES

No clusters in this field

GALAXIES

Position				NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ					
h	m	o	'				
21	41.6	+ 46	01		15.7		
21	42.0	+ 46	24		15.1		
21	42.3	+ 46	02		15.1		double system
21	42.3	+ 46	24		15.0		



FIELD No. 545

22^h10^m + 48°30'

Survey Plate No. 599

GC STARS

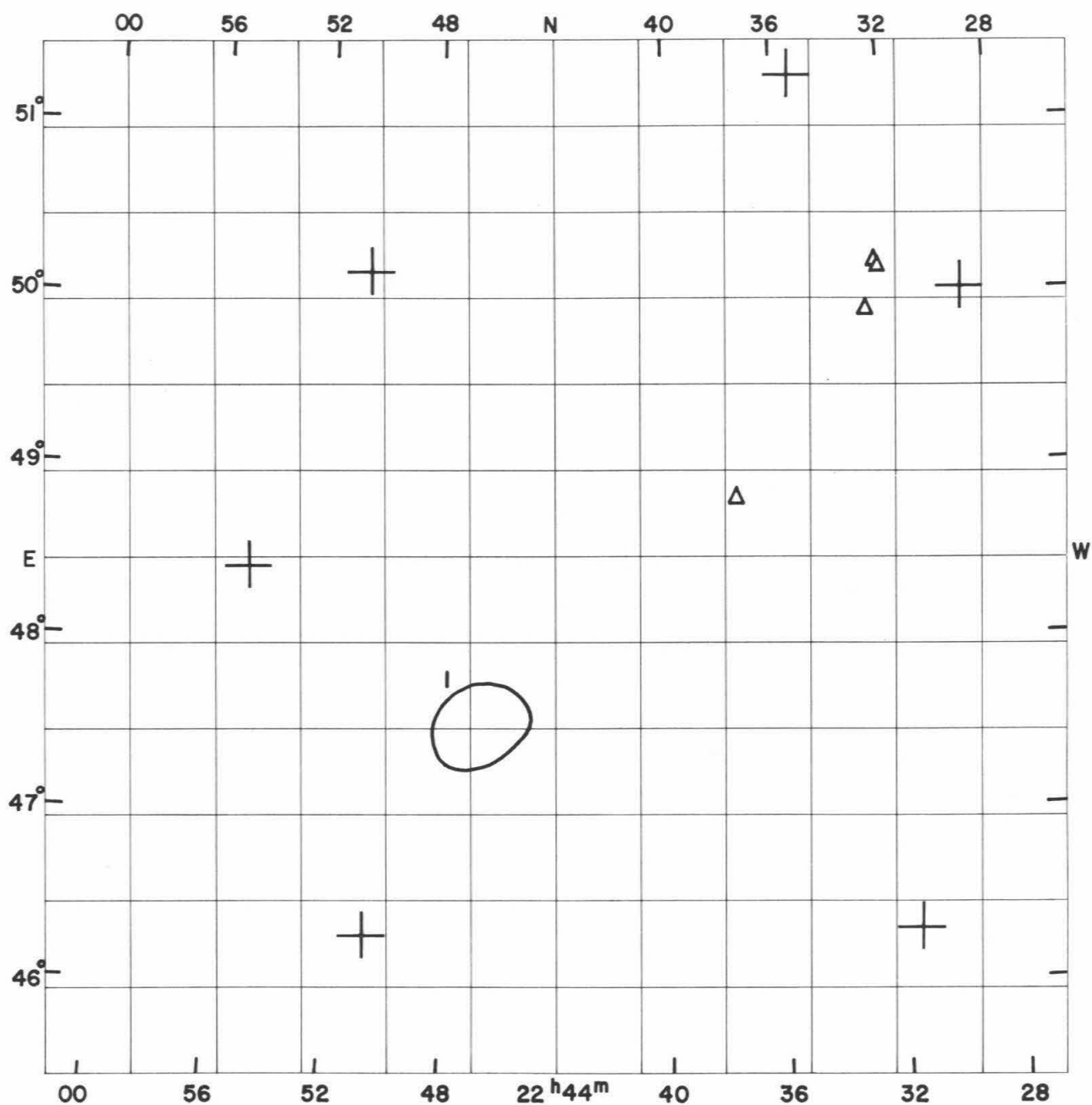
Nos.	R.A.			Decl.			m _p
	h	m	s	°	'	"	
30728	21	55	07.3	+ 46	21	14	7.02
30729	21	55	07.4	+ 48	25	46	6.35
31046	22	09	13.1	+ 50	34	33	5.44
31071	22	10	00.7	+ 46	50	54	6.67
31252	22	18	57.3	+ 46	17	03	4.66
31326	22	22	29.0	+ 49	13	20	4.64

CLUSTERS OF GALAXIES

No clusters in this field

GALAXIES

Position				NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ					
h	m	o	i				
21	59.0	+ 51	20		15.6		
22	04.3	+ 47	00		13.3		
22	06.5	+ 48	12		13.0		
22	09.6	+ 46	04		14.7		
22	18.3	+ 47	27		14.4		



FIELD No. 546
 22^h44^m + 48°30'
 Survey Plate No. 590

GC STARS

Nos.	R.A.			Decl.			m _p
	h	m	s	o	i	"	
31471	22	29	13.6	+	50	01 30	3.85
31509	22	31	29.9	+	46	18 26	7.22
31586	22	35	18.8	+	51	17 12	4.83
31910	22	50	36.2	+	46	16 57	6.70
31915	22	50	42.0	+	50	08 46	6.44
31998	22	54	51.6	+	48	25 00	5.20

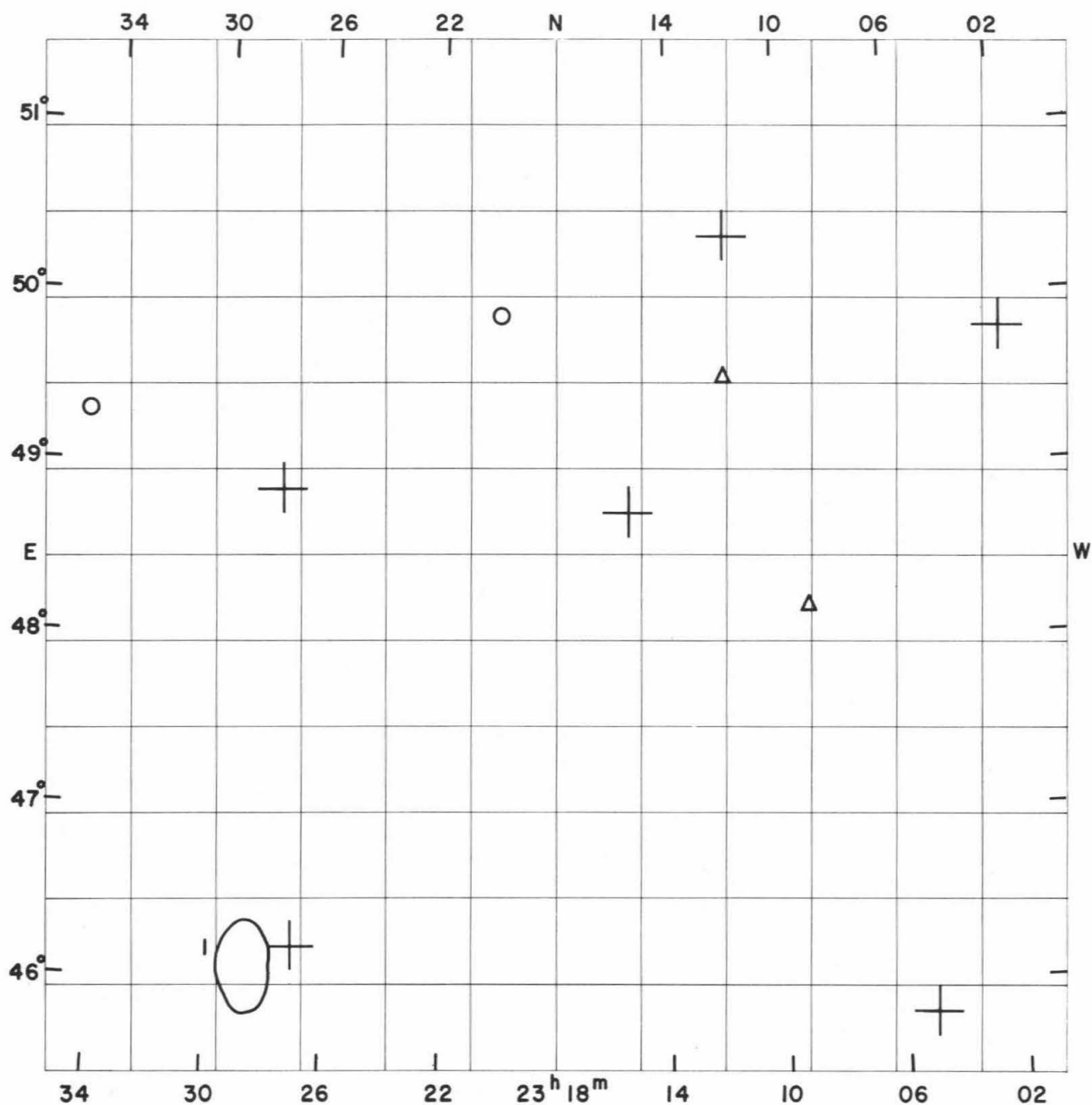
CLUSTERS OF GALAXIES

Cluster	Character	Popu- lation	Diameter in cm	Distance	Number on chart
2246.6 + 4731	medium compact	74	2.7	D	1

Average number of galaxies per cluster = 74.0

GALAXIES

Position			NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ				
h	m	o				
22	32.2	+ 50 09		15.7		
22	32.3	+ 50 11		15.7		compact
22	32.6	+ 49 55		15.6		double nebula
22	37.5	+ 48 49		15.6		



FIELD No. 547
 $23^{\text{h}}18^{\text{m}} + 48^{\circ}30'$
 Survey Plate No. 1162

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	°	'	"	
32144	23	01	55.9	+	49	46 48	4.91
32208	23	05	00.3	+	45	47 51	6.56
32350	23	11	56.8	+	50	20 43	6.25
32432	23	15	25.1	+	48	44 30	4.99
32676	23	27	02.8	+	46	11 21	6.67
32684	23	27	43.9	+	48	51 26	6.38

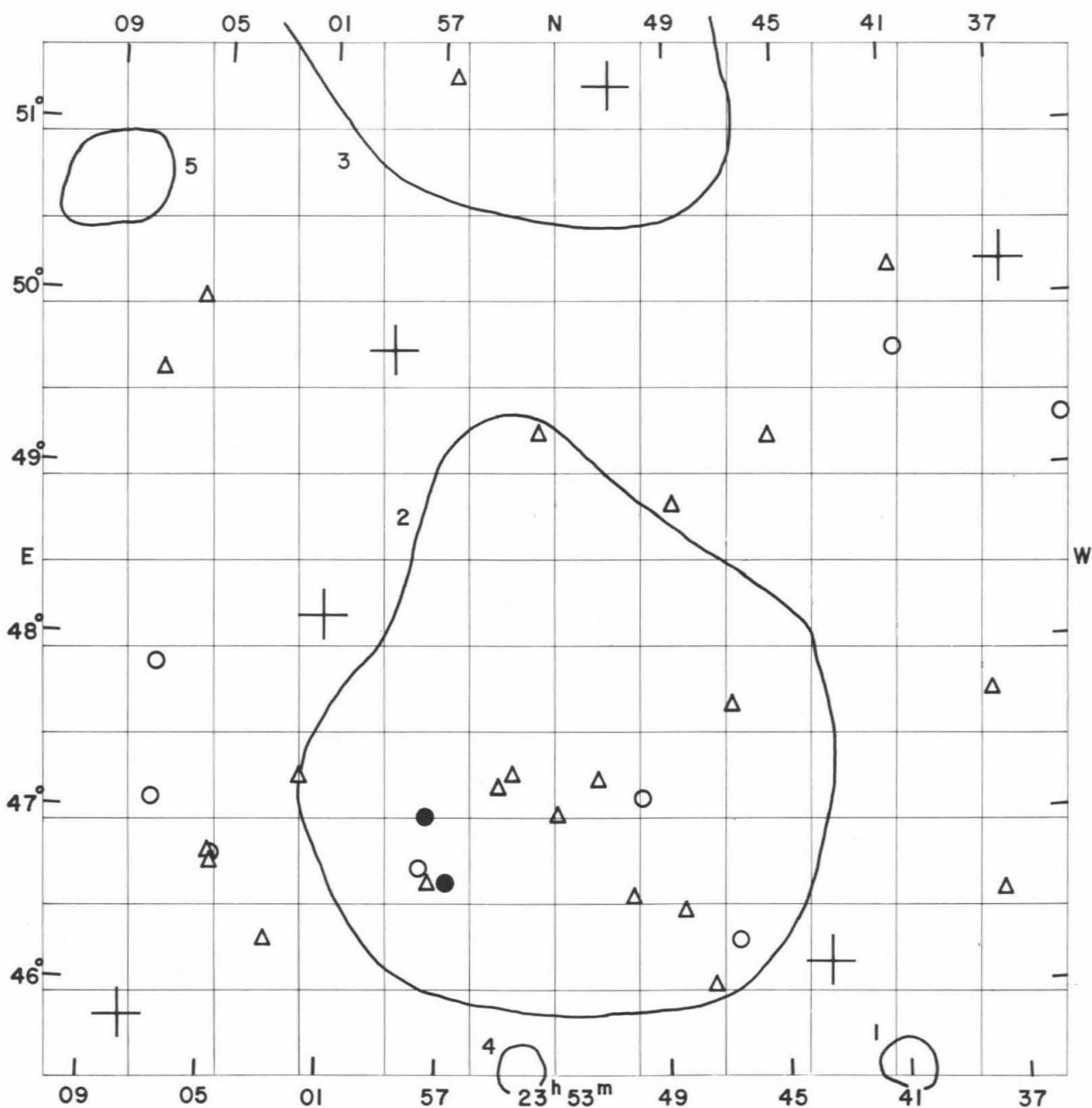
CLUSTERS OF GALAXIES

Cluster	Character	Popu- lation	Diameter in cm	Distance	Number on chart
2328.6 + 4604	compact	60	2.2	ED	1

Average number of galaxies per cluster = 60.0

GALAXIES

Position			NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ				
h	m	o				
23	09.0	+ 48 11		15.7		
23	12.0	+ 49 32		15.7		
23	20.0	+ 49 54		14.9		
23	34.8	+ 49 17		15.0		double nebula



FIELD No. 548
 $23^{\text{h}}53^{\text{m}} + 48^{\circ}30'$
 Survey Plate No. 368

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	°	'	"	
32864	23	36	42.4	+	50	11 41	5.32
32988	23	43	32.9	+	46	08 33	5.09
33145	23	51	03.1	+	51	14 40	6.97
33311	23	58	45.4	+	49	42 12	6.36
22	0	01	07.5	+	48	09 32	6.76
169	0	07	42.7	+	45	47 39	5.08

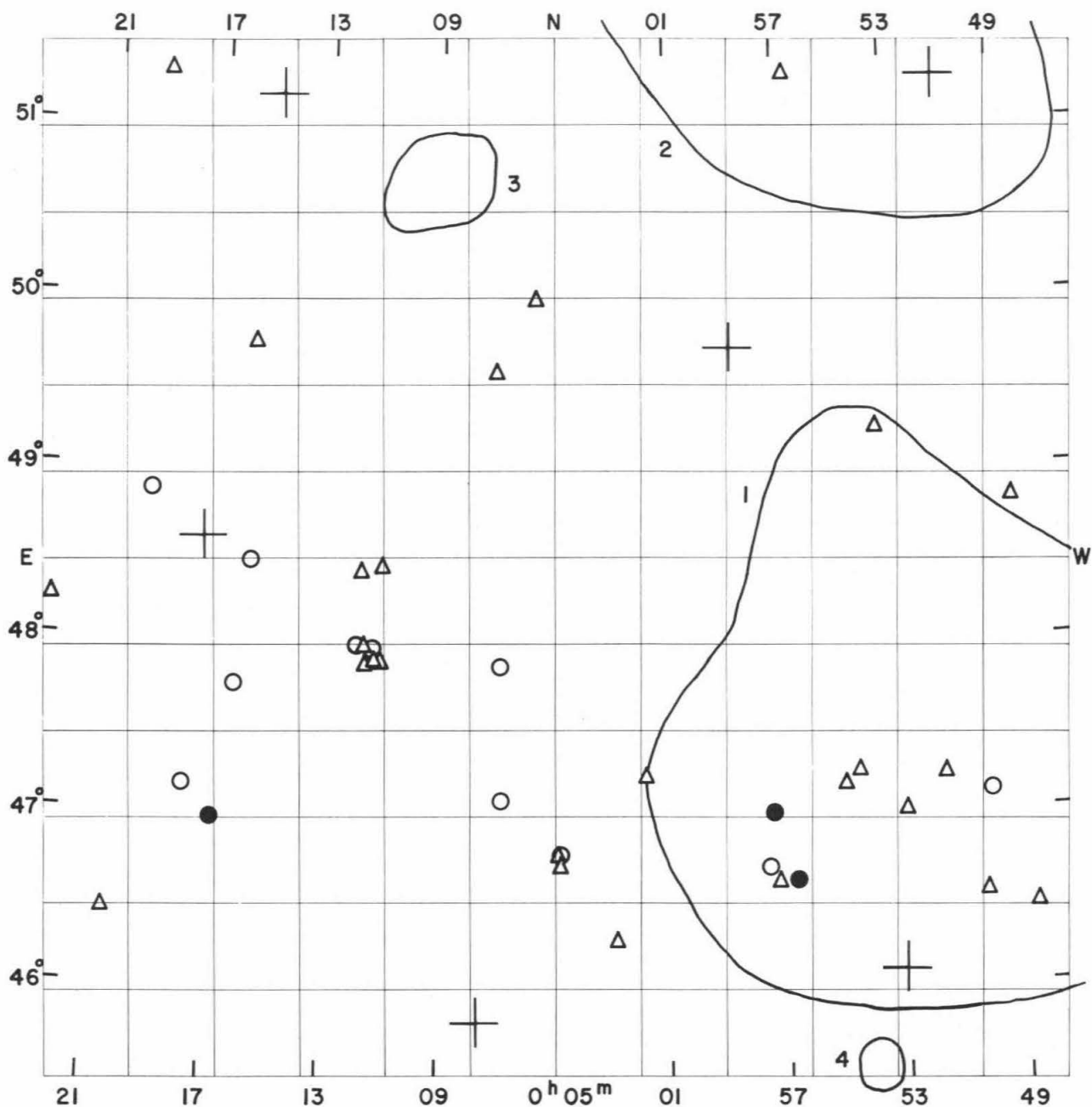
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
2341.1 + 4532	medium compact	57	1.6	VD	1
2352.1 + 4718	open	178	17.2	Near	2
2354.1 + 4532	compact	57	1.5	ED	4
2354.9 + 5212	open	185	17.3	Near	3
0009.1 + 5040	medium compact	86	3.4	D	5

Average number of galaxies per cluster = 112.6

GALAXIES

Position			NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ				
h	m	o				
23	34.8	+ 49 17		15.0		double nebula
23	37.6	+ 46 33		15.7		
23	37.7	+ 47 42		15.4		compact
23	40.8	+ 49 43		15.0		
23	40.9	+ 50 11		15.7		very compact
23	45.3	+ 49 11		15.7		
23	46.7	+ 46 17		14.9		
23	46.8	+ 47 39		15.2		
23	47.5	+ 46 01		15.7		
23	48.5	+ 46 27		15.3		
23	48.8	+ 48 48		15.6		
23	50.0	+ 47 07		14.6		extremely compact nucleus
23	50.3	+ 46 32		15.4		
23	51.5	+ 47 13		15.5		star superposed
23	52.9	+ 47 00		15.3		
23	53.6	+ 49 13		15.5		diffuse
23	54.5	+ 47 15		15.7		
23	55.0	+ 47 10		15.5		compact
23	56.6	+ 51 17		15.7		
23	56.8	+ 46 37	1525*	13.3		
23	57.3	+ 46 37		15.1		
23	57.5	+ 47 00		14.0		
23	57.7	+ 46 41		14.8		
0	01.9	+ 47 13		15.1		
0	02.9	+ 46 16		15.3		very compact
0	04.9	+ 46 43		15.3		
0	04.9	+ 46 46		14.3		
0	05.0	+ 46 46		15.6		
0	05.7	+ 49 59		15.7		
0	06.9	+ 47 05		14.5		
0	07.0	+ 47 51		15.0		
0	07.1	+ 49 34		15.2		double system



FIELD No. 549
 $0^h 05^m + 48^{\circ} 30'$
 Survey Plate No. 839

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	°	'	"	
33145	23	51	03.1	+	51	14 40	6.97
33187	23	53	05.9	+	46	04 48	6.84
33311	23	58	45.4	+	49	42 12	6.36
169	0	07	42.7	+	45	47 39	5.08
345	0	15	03.3	+	51	09 20	6.12
400	0	17	25.2	+	48	35 17	6.27

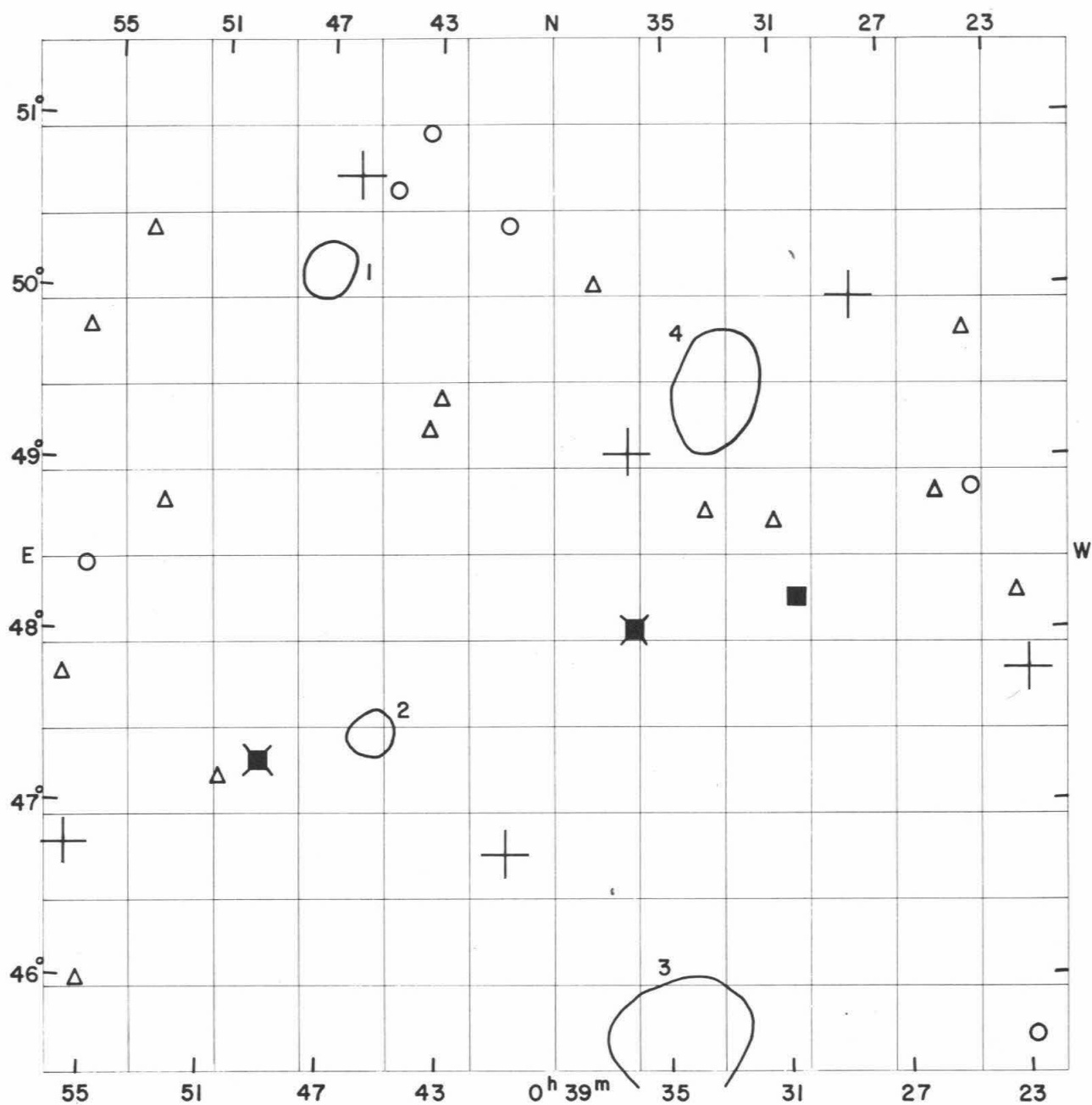
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
2352.1 + 4718	open	178	17.2	Near	1
2354.1 + 4532	compact	57	1.5	ED	4
2354.9 + 5212	open	185	17.3	Near	2
0009.1 + 5040	medium compact	86	3.4	D	3

Average number of galaxies per cluster = 126.5

GALAXIES

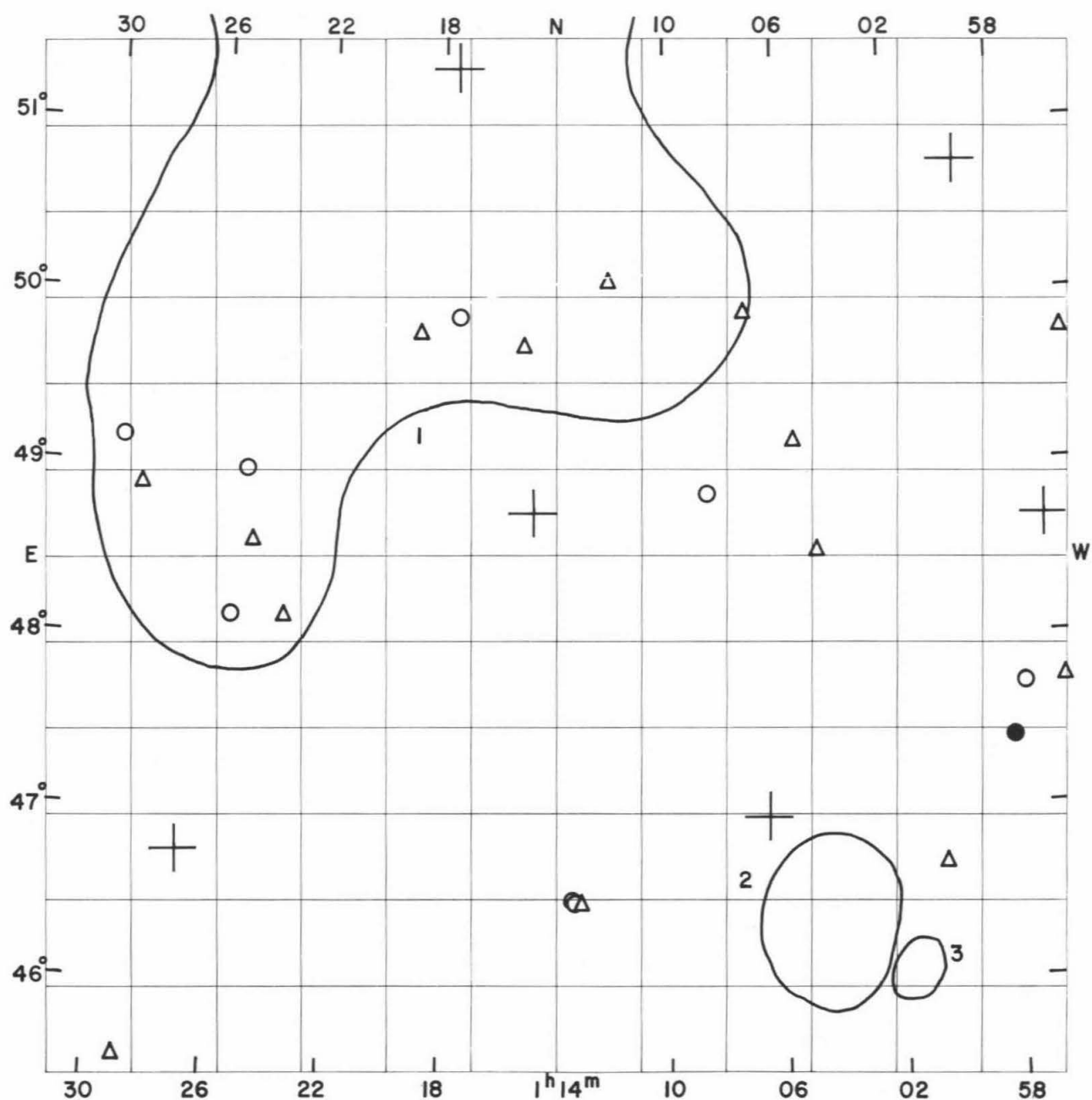
Position			NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ				
h	m	o				
23	48.5	+46 27		15.3		
23	48.8	+48 48		15.6		
23	50.0	+47 07		14.6		extremely compact nucleus
23	50.3	+46 32		15.4		
23	51.5	+47 13		15.5		star superposed
23	52.9	+47 00		15.3		
23	53.6	+49 13		15.5		diffuse
23	54.5	+47 15		15.7		
23	55.0	+47 10		15.5		compact
23	56.6	+51 17		15.7		
23	56.8	+46 37	1525*	13.3		
23	57.3	+46 37		15.1		
23	57.5	+47 00		14.0		
23	57.7	+46 41		14.8		
0	01.9	+47 13		15.1		
0	02.9	+46 16		15.3		very compact
0	04.9	+46 43		15.3		
0	04.9	+46 46		14.3		
0	05.0	+46 46		15.6		
0	05.7	+49 59		15.7		
0	06.9	+47 05		14.5		
0	07.0	+47 51		15.0		
0	07.1	+49 34		15.2		double system
0	11.0	+48 25		15.1		
0	11.1	+47 53	1534*	15.2		
0	11.3	+47 53	1535*	15.2		
0	11.4	+47 58	48	15.0		
0	11.7	+47 52	1536*	15.7		
0	11.7	+47 58	49	15.3		
0	11.8	+48 24		15.7		
0	11.9	+47 59	51	14.6		
0	15.7	+48 27		14.4		
0	15.8	+49 43		15.5		diffuse
0	16.1	+47 44		14.5		
0	16.9	+46 58		13.8		
0	17.9	+47 10		14.2		
0	19.1	+51 17		15.7		
0	19.3	+48 51		14.8		
0	20.5	+46 26		15.7		compact nucleus
0	22.7	+48 13		15.5		star superposed



FIELD No. 550
 $0^h 39^m + 48^\circ 30'$
 Survey Plate No. 1224

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	°	'	"	
489	0	22	25.8	+47	46	15	7.61
604	0	28	18.4	+49	58	40	7.42
770	0	36	23.4	+49	04	48	5.72
856	0	40	41.4	+46	45	05	5.02
961	0	45	59.3	+50	41	45	5.03
1169	0	55	51.7	+46	46	02	6.75



FIELD No. 551

$1^h 14^m + 48^\circ 30'$

Survey Plate No. 863

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	°	'	"	
1183	0	56	39.3	+	48	41 50	7.10
1241	0	59	23.1	+	50	45 59	6.62
1394	1	06	35.3	+	46	58 33	4.28
1553	1	14	49.1	+	48	44 44	6.82
1611	1	17	38.4	+	51	19 59	7.17
1806	1	27	05.5	+	46	45 00	5.33

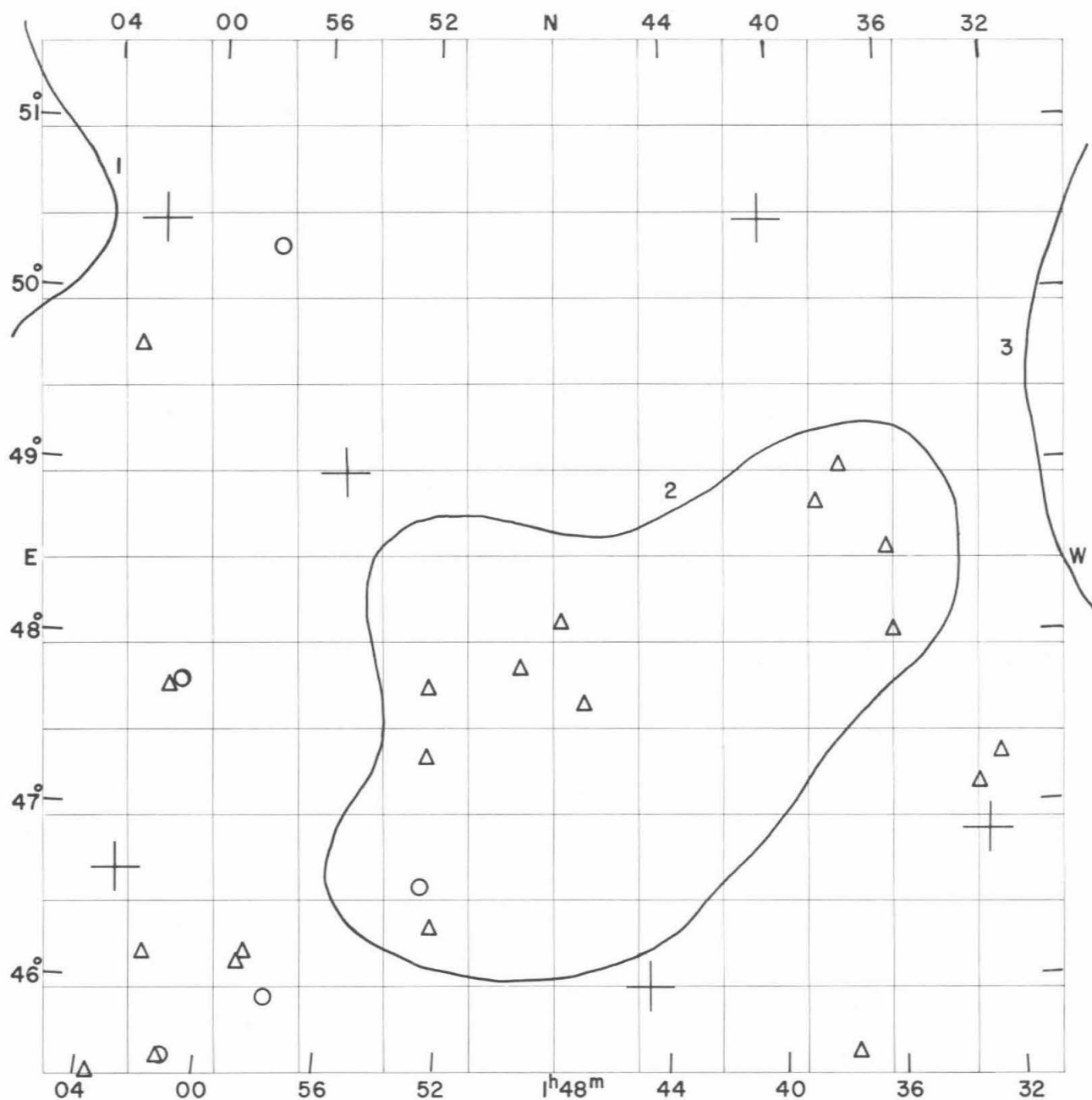
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0101.7 + 4603	compact	70	1.8	VD	3
0104.6 + 4621	medium compact	128	4.8	D	2
0119.6 + 5035	open	316	21.4	Near	1

Average number of galaxies per cluster = 171.3

GALAXIES

Position a 1950 δ			NGC IC*	m_p	V_s km/sec	Remarks
h	m	o				
0	55.7	+49 46		15.4		
0	56.1	+47 45		15.6		
0	57.6	+47 43		14.6		
0	58.0	+47 25	65*	13.8		
1	00.6	+46 41		15.6		
1	04.8	+48 30		15.7		very compact
1	05.5	+49 08		15.6		
1	07.2	+49 55		15.7		
1	08.7	+48 51		14.8		
1	12.1	+50 05		15.7		
1	13.1	+46 28		15.1		
1	13.3	+46 29		15.0		
1	13.4	+46 29		14.6		
1	15.1	+49 42		15.7		diffuse
1	17.4	+49 53		15.0		
1	18.9	+49 47		15.5		compact
1	23.6	+48 08		15.3		
1	24.8	+48 33		15.4		
1	25.0	+48 59		14.9		
1	25.4	+48 07	562	14.5		
1	28.8	+48 52		15.4		
1	29.0	+45 33		15.7		
1	29.5	+49 09		15.0		



FIELD No. 552

$1^{\text{h}}48^{\text{m}} + 48^{\circ}30'$

Survey Plate No. 861

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	o	i	"	
1928	1	33	00.7	+	46	51 34	7.02
2102	1	40	30.8	+	50	26 16	4.19
2176	1	44	43.1	+	45	58 53	6.32
2372	1	55	22.1	+	48	57 39	5.78
2504	2	02	11.4	+	50	24 18	7.12
2516	2	03	00.1	+	46	37 20	7.48

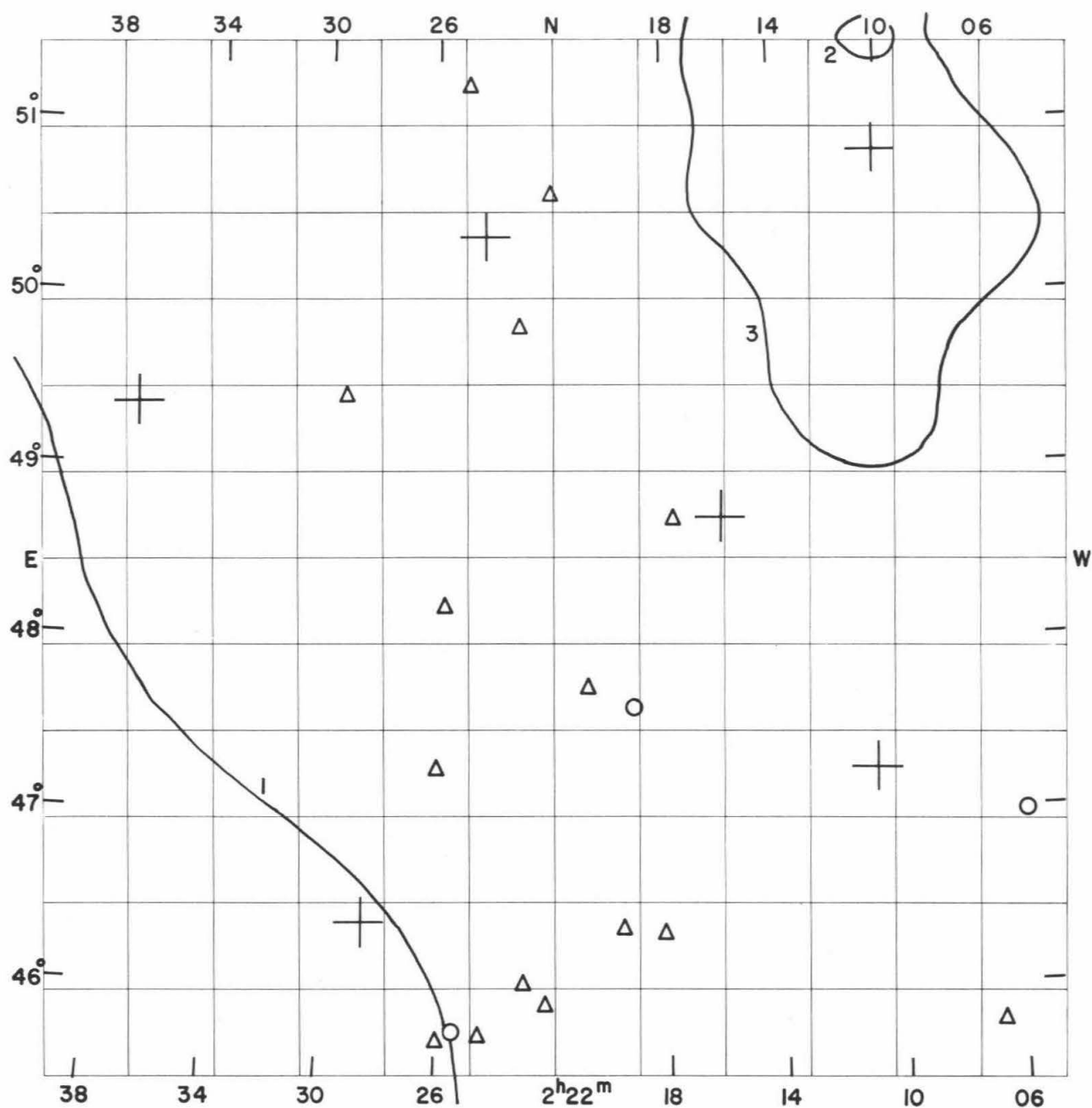
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0119.6 + 5035	open	316	21.4	Near	3
0145.8 + 4740	open	265	16.7	Near	2
0210.9 + 5038	open	182	11.9	Near	1

Average number of galaxies per cluster = 254.3

GALAXIES

Position a 1950 δ h m o r			NGC IC*	m_p	V_s km/sec	Remarks
1	32.4	+ 47 18		15.2		
1	33.3	+ 47 08		15.7		compact
1	36.1	+ 48 02		15.3		
1	36.2	+ 48 31		15.7		
1	37.6	+ 45 35		15.1		compact
1	37.8	+ 49 00		15.6		
1	38.7	+ 48 47		15.7		
1	47.0	+ 47 38		15.7		
1	47.8	+ 48 06		15.6		
1	49.1	+ 47 50		15.7		
1	52.2	+ 46 19		15.2		compact
1	52.3	+ 47 43		15.6		
1	52.4	+ 47 19		15.4		double system
1	52.6	+ 46 34		15.0		
1	57.8	+ 45 55		14.9		
1	57.9	+ 50 16		14.4		
1	58.5	+ 46 10		15.5		
1	58.7	+ 46 05		15.5		
2	00.9	+ 47 44		14.7		
2	01.2	+ 45 32		15.0		double system
2	01.4	+ 45 32		15.4		
2	01.4	+ 47 42		15.5		
2	01.9	+ 46 08		15.6		
2	02.9	+ 49 40		15.6		
2	03.7	+ 45 27		15.7		compact



FIELD No. 553
 $2^{\text{h}}22^{\text{m}} + 48^{\circ}30'$

Survey Plate No. 907

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	°	'	"	
2653	2	10	15.9	+	50	50 05	5.40
2668	2	10	49.5	+	47	15 06	6.03
2785	2	16	06.2	+	48	43 29	6.40
2944	2	24	29.7	+	50	20 51	6.27
3016	2	28	37.1	+	46	21 55	7.06
3193	2	36	57.3	+	49	20 46	6.51

CLUSTERS OF GALAXIES

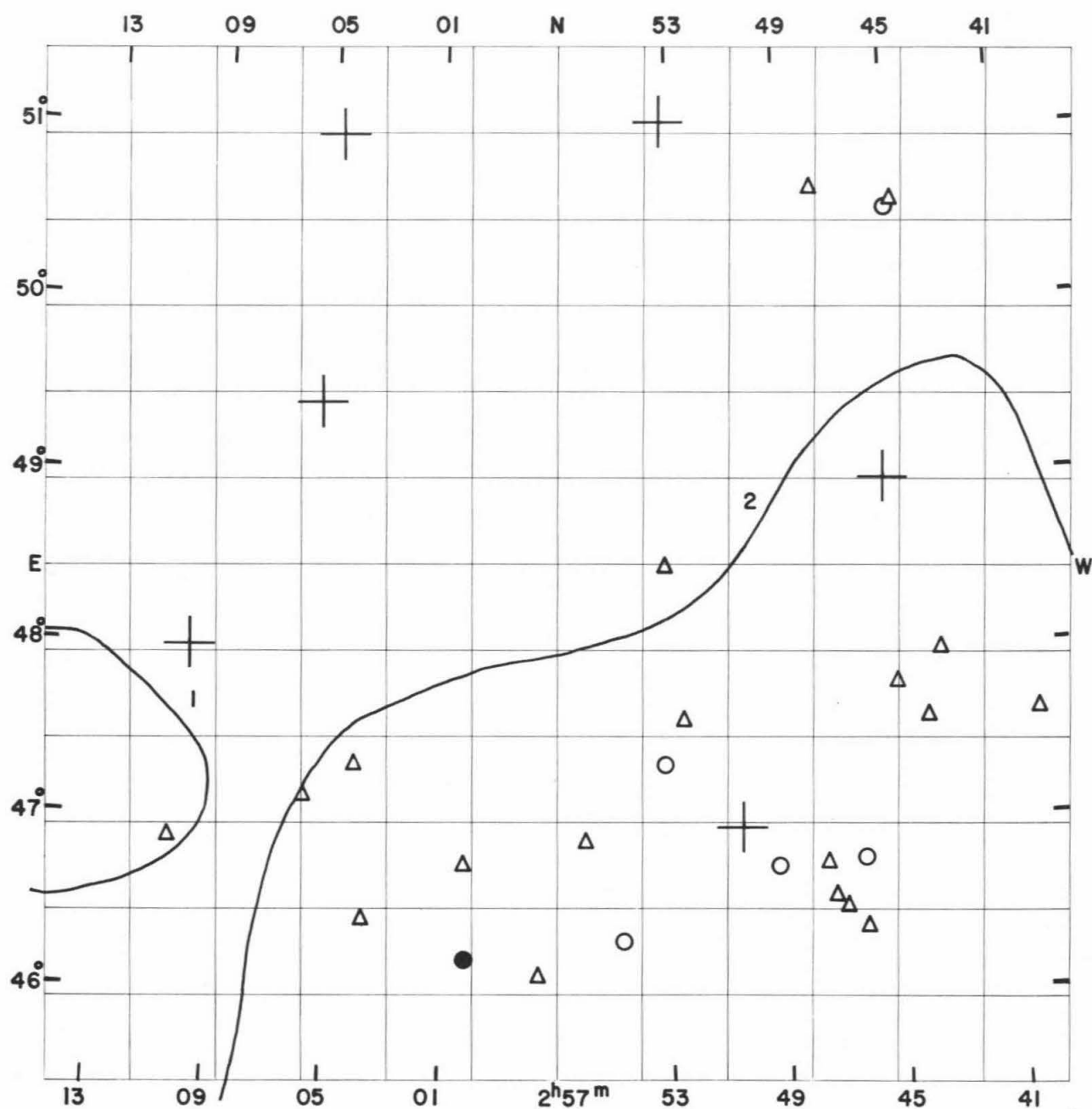
Cluster	Character	Popu- lation	Diameter in cm	Distance	Number on chart
0210.2 + 5130	compact	48	1.5	VD	2
0210.9 + 5038	open	182	11.9	Near	3
0303.0 + 4125	medium compact	5130	77.1	Near	1 *)

Average number of galaxies per cluster = 1786.7

*) Cluster No. 1 contains the conventional Perseus Cluster as one of its condensations. See special map on page 244.

GALAXIES

Position a 1950 δ h m o			NGC IC*	m_p	V_s km/sec	Remarks
2 05.7	+	46 59		15.0		
2 06.8	+	45 47		15.7		
2 17.8	+	48 44		15.6		
2 18.2	+	46 20		15.7		
2 19.3	+	47 37		14.8		
2 19.7	+	46 20		15.7		
2 20.8	+	47 45		15.7		
2 22.1	+	50 36		15.7		
2 22.4	+	45 55		15.7		
2 23.1	+	46 02		15.6		
2 23.3	+	49 50		15.5		
2 24.6	+	45 44	920	15.6		
2 25.0	+	51 14		15.2		
2 25.5	+	45 45	1799*	15.0		
2 25.8	+	48 13		15.5		
2 26.0	+	45 42	933	15.5		
2 26.0	+	47 17		15.7		
2 29.4	+	49 25		15.7		



FIELD No. 554

$2^{\text{h}}57^{\text{m}} + 48^{\circ}30'$

Survey Plate No. 845

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	°	'	"	
3362	2	45	25.1	+	48	58 36	7.40
3461	2	50	38.2	+	46	57 28	6.73
3525	2	53	19.5	+	51	03 38	6.52
3732	3	04	53.0	+	50	58 34	6.97
3740	3	05	26.7	+	49	25 27	4.17
3830	3	09	54.9	+	47	59 26	5.96

CLUSTERS OF GALAXIES

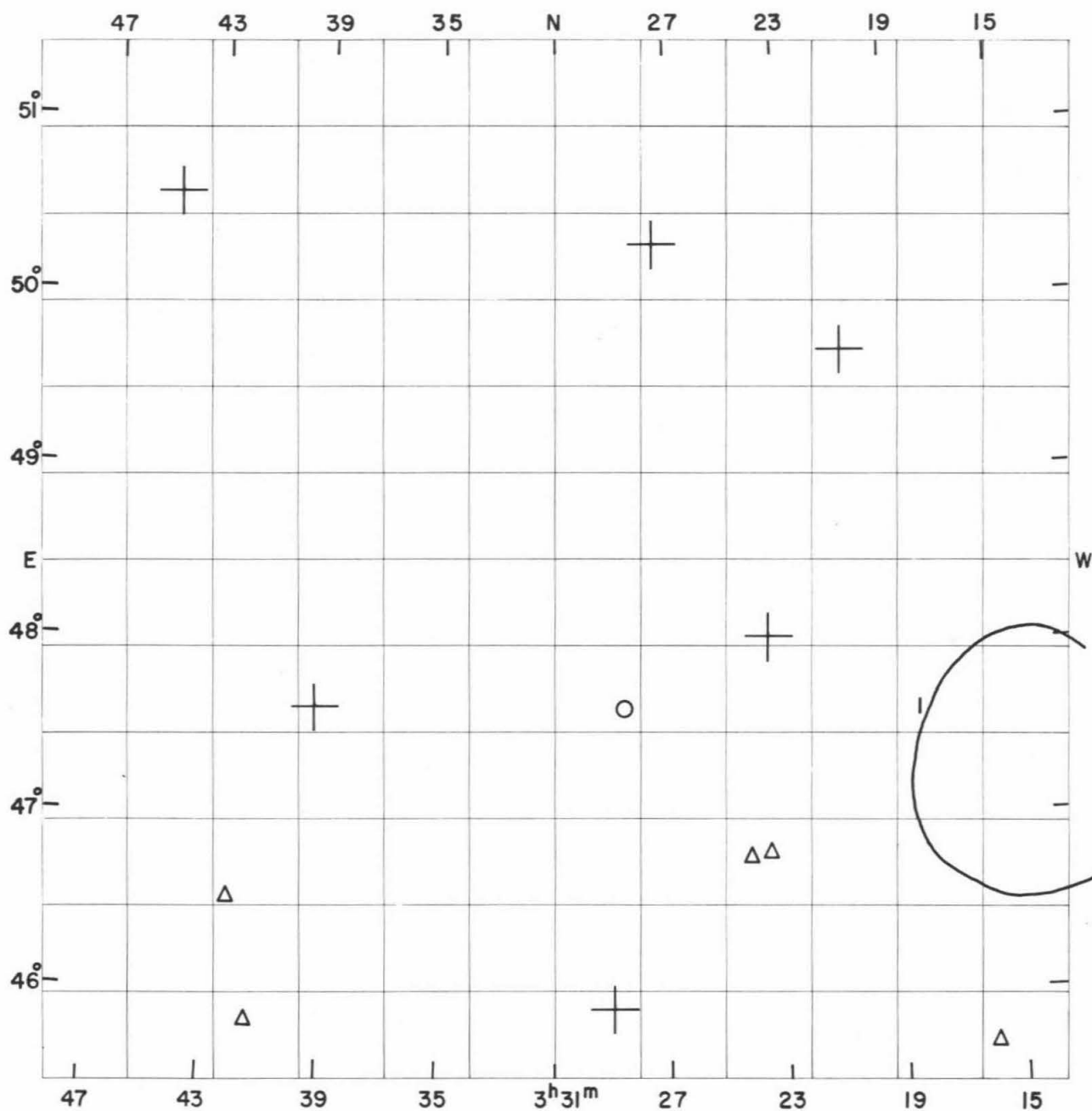
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0303.0 + 4125	medium compact	5130	77.1	Near	2 *)
0314.1 + 4716	medium compact	143	8.3	MD	1

Average number of galaxies per cluster = 2636.5

*) Cluster No. 2 contains the conventional Perseus Cluster as one of its condensations. See special map on page 244.

GALAXIES

Position a 1950 δ h m o			NGC IC*	m_p	V_s km/sec	Remarks
2 40.2	+ 47	37		15.2		
2 43.6	+ 48	00		15.4		
2 44.1	+ 47	35		15.5		
2 44.8	+ 50	36		15.2		
2 45.0	+ 50	33		14.8		
2 45.1	+ 47	47		15.7		
2 46.4	+ 46	23		15.7		
2 46.4	+ 46	47	257*	14.5		
2 47.0	+ 46	30		15.6		
2 47.4	+ 46	34		15.7		
2 47.7	+ 46	45	260*	15.2		compact
2 47.8	+ 50	40		15.3		
2 49.4	+ 46	45		14.9		
2 52.6	+ 47	36		15.7		
2 53.1	+ 48	30		15.7		
2 53.2	+ 47	20		14.9		
2 54.7	+ 46	18		15.0		
2 56.0	+ 46	53		15.5		
2 57.7	+ 46	06		15.7		
3 00.1	+ 46	12	1169	13.2		$m_H = 13.0$
3 00.1	+ 46	45		15.5		
3 03.6	+ 46	26		15.1		
3 04.0	+ 47	20		15.7		
3 05.7	+ 47	09		15.7		
3 10.2	+ 46	52		15.7		



FIELD No. 555

$3^{\text{h}}31^{\text{m}}$ + $48^{\circ}30'$

Survey Plate No. 1249

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
4041	3 20 44.5	+ 49 41 06	1.90
4090	3 23 33.2	+ 48 01 55	6.87
4168	3 27 29.2	+ 50 18 43	7.32
4210	3 28 57.8	+ 45 53 21	5.35
4427	3 39 21.3	+ 47 37 46	3.10
4544	3 44 36.5	+ 50 35 01	5.92

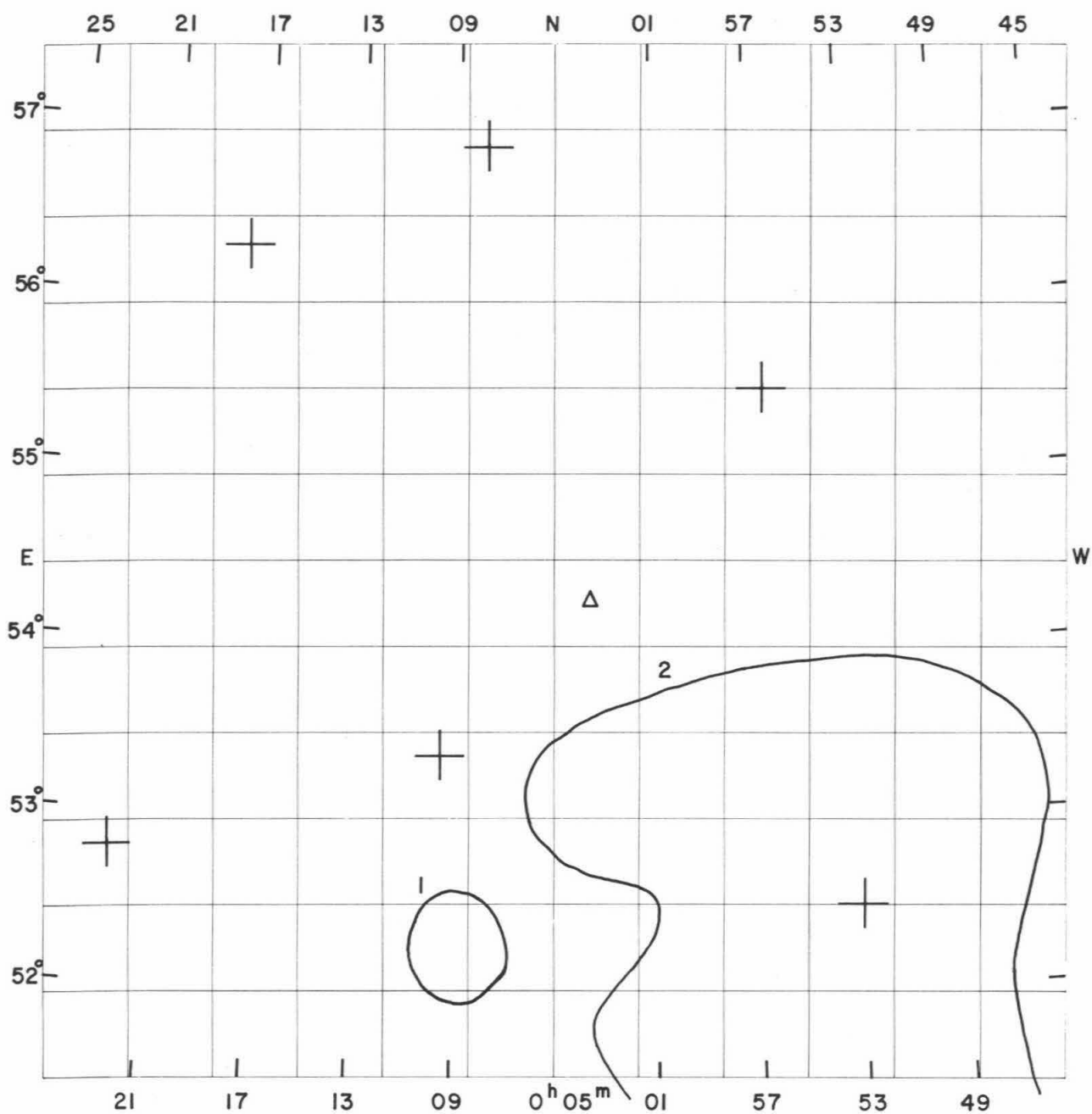
CLUSTERS OF GALAXIES

Cluster	Character	Popu- lation	Diameter in cm	Distance	Number on chart
0314.1 + 4716	medium compact	143	8.3	MD	1

Average number of galaxies per cluster = 143.0

GALAXIES

Position			NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ				
h	m	o				
3	16.0	+45 41		15.7		
3	23.6	+46 49		15.7		
3	24.3	+46 47		15.5		
3	28.6	+47 38		15.0		
3	41.5	+45 50		15.3		compact
3	42.2	+46 32		15.4		



FIELD No. 556

$0^h 05^m + 54^\circ 30'$

Survey Plate No. 636

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	o	'	"	
33181	23	53	00.7	+	52	27 25	6.77
33257	23	56	27.7	+	55	28 36	4.93
176	0	07	51.7	+	56	53 15	6.54
208	0	09	29.9	+	53	20 45	6.80
410	0	17	51.6	+	56	16 46	6.79
488	0	22	23.4	+	52	46 12	5.72

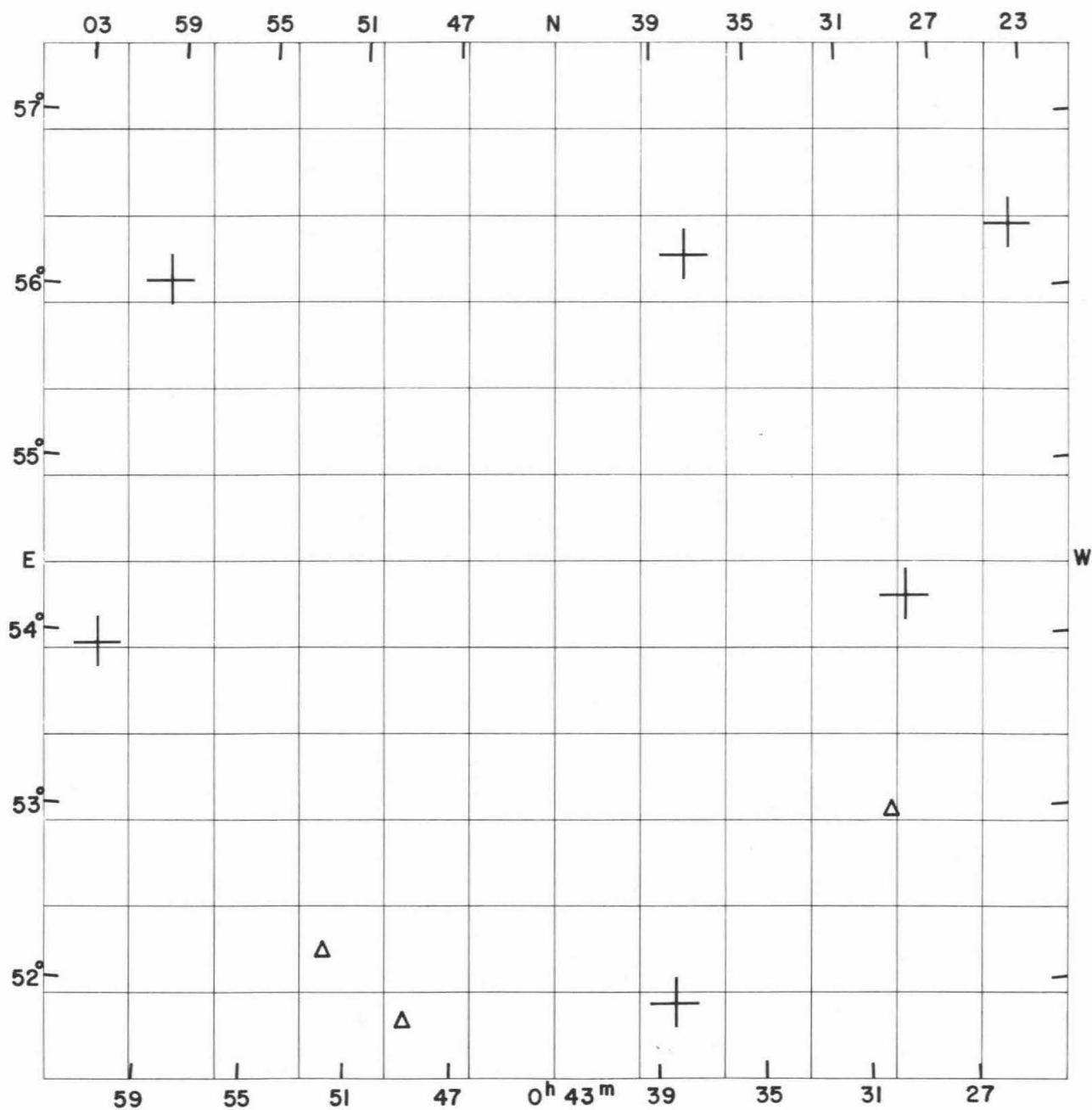
CLUSTERS OF GALAXIES

Cluster	Character	Popu- lation	Diameter in cm	Distance	Number on chart
2354.9 + 5212	open	185	17.3	Near	2
0008.8 + 5215	medium compact	82	3.3	MD	1

Average number of galaxies per cluster = 133.5

GALAXIES

Position		NGC IC*	m _p	V _s km/sec	Remarks
α	1950 δ				
h	m o ,				
0	03.6 + 54 16		15.5		diffuse



FIELD No. 557
 $0^h 43^m + 54^\circ 30'$
 Survey Plate No. 1237

GC STARS

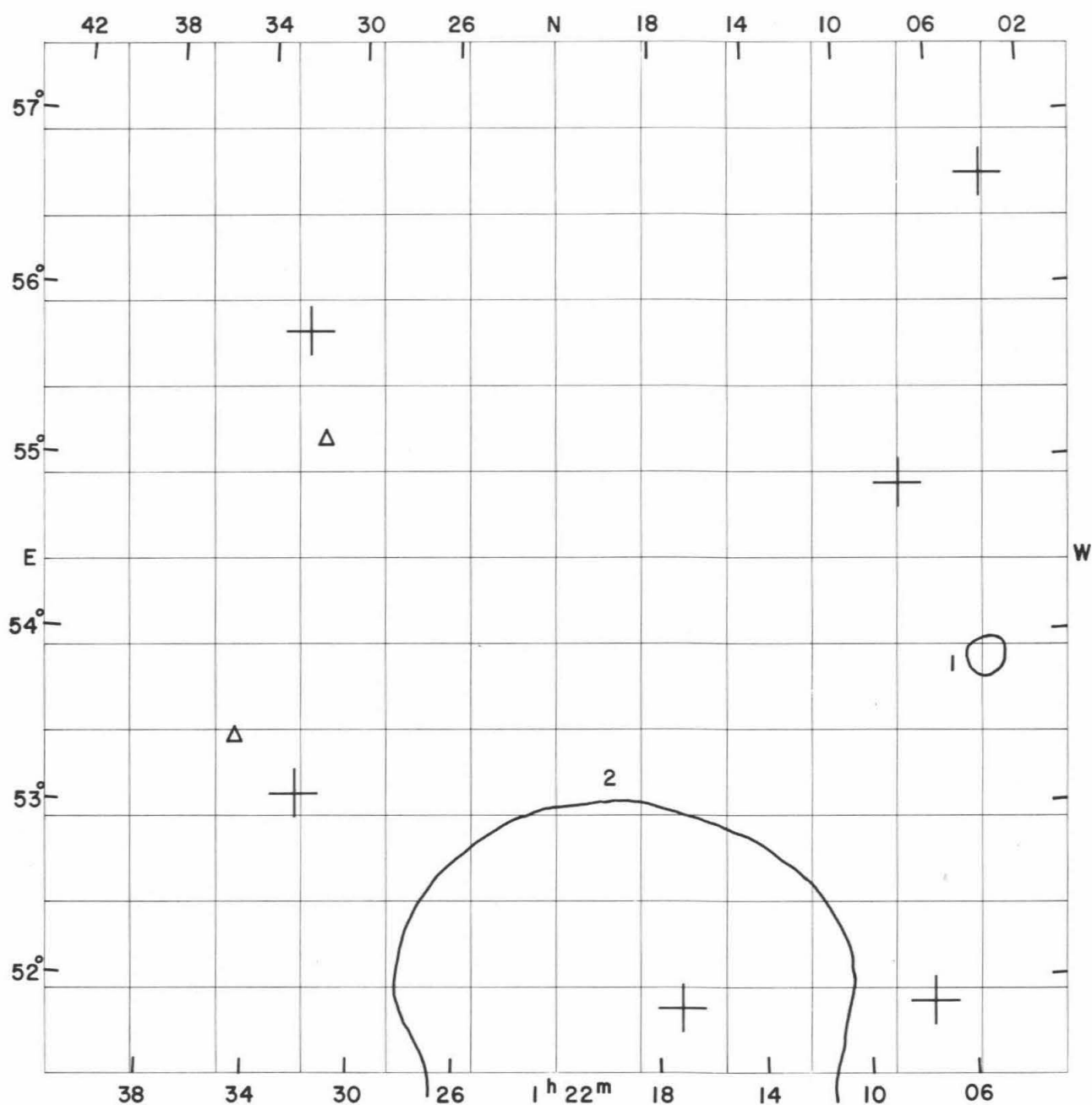
Nos.	R.A.			Decl.			m_p
	h	m	s	°	'	"	
522	0	23	54.6	+	56	21 52	6.59
618	0	29	00.1	+	54	14 47	4.88
792	0	37	39.3	+	56	15 49	Var.
813	0	38	24.3	+	51	55 26	6.83
1235	0	59	07.5	+	56	03 35	6.93
1285	1	01	18.6	+	53	56 14	6.78

CLUSTERS OF GALAXIES

No clusters in this field

GALAXIES

Position				NGC IC*	m_p	V_s km/sec	Remarks
α	1950	δ					
h	m	o	'				
0	30.0	+	53 00		15.6		very compact
0	48.8	+	51 50		15.7		
0	52.0	+	52 14		15.7		diffuse



FIELD No. 558

$1^{\text{h}}22^{\text{m}} + 54^{\circ}30'$

Survey Plate No. 945

GC STARS

Nos.	R.A.			Decl.			m_p
	h	m	s	°	'	"	
1339	1	03	57.1	+	56	40 09	6.58
1413	1	07	33.5	+	51	51 49	7.42
1424	1	08	02.6	+	54	52 04	4.52
1598	1	17	09.2	+	51	52 10	7.30
1905	1	32	12.9	+	55	47 19	7.06
1910	1	32	14.8	+	53	05 25	6.80

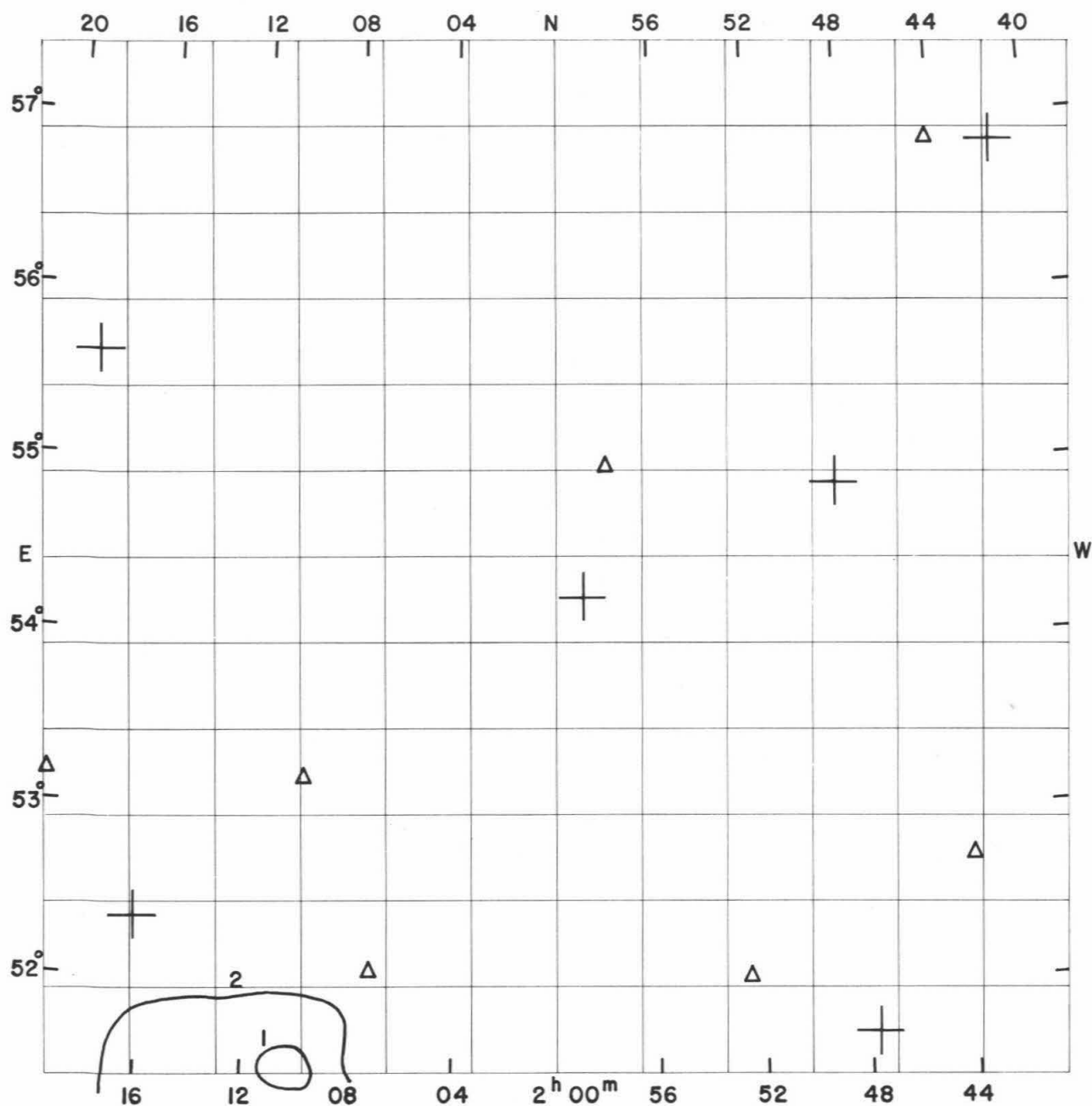
CLUSTERS OF GALAXIES

Cluster	Character	Popu- lation	Diameter in cm	Distance	Number on chart
0104.9 + 5350	compact	56	1.2	VD	1
0119.6 + 5035	open	316	21.4	Near	2

Average number of galaxies per cluster = 186.0

GALAXIES

Position				NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ					
h	m	o	'				
1	31.5	+ 55	10		15.3		
1	34.7	+ 53	25		15.7		



FIELD No. 559

$2^{\text{h}}00^{\text{m}} + 54^{\circ}30'$

Survey Plate No. 1245

GC STARS

Nos.	R. A.			Decl.			m_p
	h	m	s	o	'	"	
2116	1	41	27.6	+	56	50 18	6.18
2222	1	47	44.1	+	51	41 16	5.90
2241	1	48	41.3	+	54	54 03	5.49
2442	1	58	57.3	+	54	14 49	4.99
2788	2	16	14.8	+	52	19 54	7.04
2836	2	18	51.2	+	55	37 05	5.22

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0210.2 + 5130	compact	48	1.5	VD	1
0210.9 + 5038	open	182	11.9	Near	2

Average number of galaxies per cluster = 115.0

GALAXIES

Position			NGC IC*	m _p	V _s km/sec	Remarks
α	1950	δ				
h	m	o				
1	43.8	+ 52 42		15.6		
1	44.2	+ 56 52		15.7		
1	52.5	+ 52 03		15.2		
1	58.0	+ 55 00		15.5		
2	07.2	+ 52 05		15.3		
2	10.0	+ 53 12		15.1		compact nucleus
2	19.9	+ 53 10		15.1		

ERRORS AND OMISSIONS

IN VOLUME V

TABLE OF CONTENTS: Field No. 441 has a galactic latitude of $-36^{\circ}20'$.

Page 52: Cluster No. 5 is listed as "open"; it should be "medium compact" instead.

Page 58: Cluster No. 1 is listed as "open"; it should be "medium compact" instead.

Page 63: For galaxy $1^{\text{h}}56^{\text{m}}.1 + 00^{\circ}17'$ the NGC number is 768, not 7628.

Page 140: Last galaxy in "MAGNITUDES AND TYPES FROM OTHER SOURCES" is NGC 524.

Page 165: For galaxy $4^{\text{h}}37^{\text{m}}.8 + 04^{\circ}06'$ add: " $V_s = 4600$ ", and also add the footnote " $m_p = 15.1$ (Pettit)".

Page 198: Remove the extraneous mark outside of the lower right corner of the chart.

Page 204: For the Dwarf galaxy at $23^{\text{h}}26^{\text{m}}.0 + 14^{\circ}27'$ the magnitude should read "13.2". Its symbol on the chart should be a filled circle. Add the footnote: "Holmberg gives $m_p = 12.50$ Ir I".

Page 270: Cluster No. 6 is listed as "D", it should be "MD" instead.

Page 274: Cluster No. 3 is listed as "D", it should be "MD" instead.

Page 290: For galaxy $1^{\text{h}}18^{\text{m}}.6 + 16^{\circ}46'$ the remark should be "compact elliptical".

Field No. 461: The following cluster must be added:

0209.3 + 2125 medium compact 88 2.2 VD 18

Change the average number of galaxies to read 107.7 instead of 108.9. A numbered contour should be drawn in the proper place on the chart, as shown in the diagram.

Page 302: For galaxy $2^h36^m.3 + 18^\circ10'$ add: " $V_s = +4037''$ ".

